

Ciba Specialty Chemicals Corporation
North America

Corporate
Remediation Services

REC'D 12-8-03
FB.

Ciba

December 3, 2003

Mr. Frank Battaglia (2 copies)
USEPA Region I
Office of Site Remediation and Restoration (HBT)
JFK Federal Building
Boston, MA 02203

**Re: Semiannual Monitoring Report for July – December 2003
Ciba Specialty Chemicals, 180 Mill Street, Cranston, RI 02905
EPA ID RID001194323**

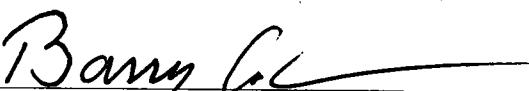
Dear Mr. Battaglia:

Ciba is pleased to submit the semiannual monitoring report for the Ciba Specialty Chemicals facility located at 180 Mill Street, Cranston, RI. The report covers the monitoring activities and the results of these activities that were performed at the facility in October 2002. These monitoring activities are described in the Pawtuxet River Corrective Measures Study (PRCMS) Report (Section 3.5.1, page 3-12) as submitted to the USEPA in August 1996.

The Groundwater Extraction and Treatment System is controlling releases to the Pawtuxet River. Remediation of contamination is working and the report describes the on going improvement in the area north of the bulkhead.

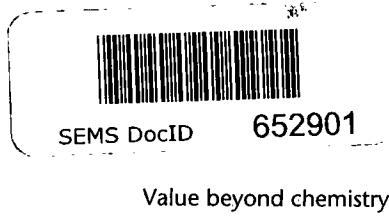
If you have questions or need additional information, please contact me at 732 914-2537 or fax 732 914-2909.

Sincerely,


Barry Cohen
Compliance Manager

c: Ms. Margaret Dein Bradley, RIDEM

Oak Ridge Parkway
P.O. Box 71
Toms River, NJ 08754-0071
Tel. 732 914 2500





Ciba

SEMIANNUAL MONITORING REPORT

**CIBA-GEIGY FACILITY
180 MILL STREET
CRANSTON, RHODE ISLAND**

MONITORING RESULTS

FOR

JULY – DECEMBER 2003

**CIBA SPECIALTY CHEMICALS CORPORATION
TOMS RIVER, NEW JERSEY 08754**

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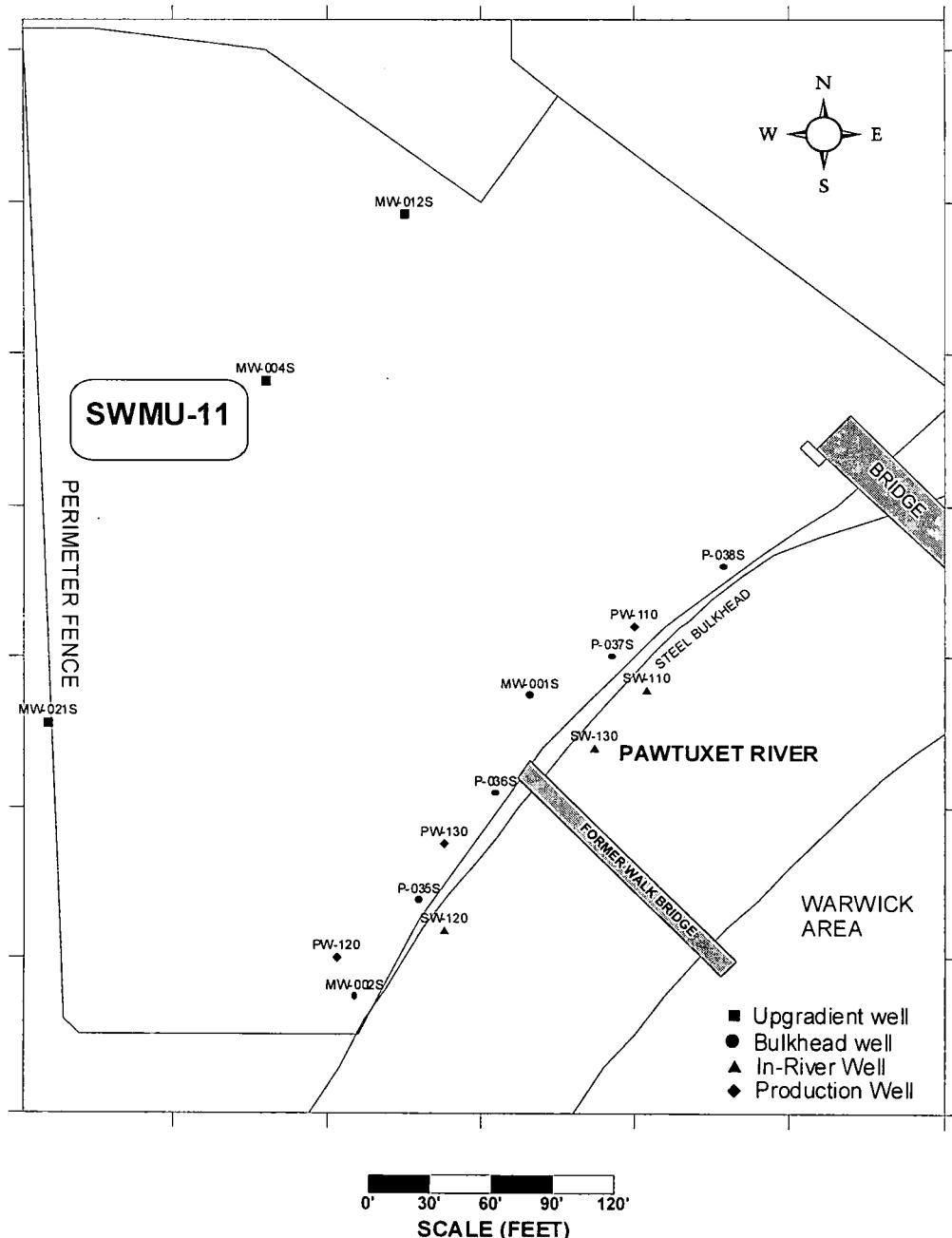
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- Appendix A Tabulated Groundwater Elevation Data and Potentiometric contours
- Appendix B Time-Series Graphs and Data for Upgradient Wells
- Appendix C Time-Series Graphs and Data for Bulkhead Wells
- Appendix D Time-Series Graphs and Data for In-River Wells
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WELL LOCATION MAP

CIBA SPECIALTY CHEMICALS CORPORATION (FORMERLY CIBA-GEIGY CORPORATION) CRANSTON, RI FACILITY FORMER PRODUCTION AREA

Chemical Well Monitoring Network



1.0 SUMMARY

On June 16, 1989, Ciba-Geigy Corporation (now Ciba Specialty Chemicals Corporation (Ciba)) entered into an Administrative Order on Consent (AOC) with the USEPA. The AOC required Ciba to conduct a Corrective Measures Study (CMS) and propose Media Protection Standards (MPSs) for the former manufacturing facility at Cranston, RI (the Facility). MPSs for five chemicals of concern (COC) were developed (see Table 1) and are monitored at 12 wells two times a year.

The second 2003 semiannual monitoring episode was performed on October 2-3, at which time 11 monitor wells and 3 extraction wells were sampled and analyzed by Rhode Island Analytical for a suite of chemicals including the COC. A twelfth well, SW-130, was not sampled due to a blockage within the well. Since this well has demonstrated mostly non-detect for contaminants Ciba has requested in a letter to the EPA dated July 15, 2003, that the well be dropped from the monitoring program. Semiannual water level readings were recorded on October 1, 2003.

A third extraction well, PW-130, began operating on December 20, 1999. The new well complements the two existing extraction wells to achieve hydraulic capture of the plume along the bulkhead in the former Production Area. The potentiometric surface map (Figure 2, Appendix A) demonstrates capture along the bulkhead.

The sampling results for October 2003 shows 1,2-dichlorobenzene exceeding the MPSs in two wells (MW-002S & P-035S) and chlorobenzene exceeding the MPS in one well (MW-002S) along the bulkhead. These results do not compare favorably to the last sampling in April. The presence of dichlorobenzene increased in both wells and the chlorobenzene increased more than three-fold in well MW-002S. However, when we review the history of well 2S over the last two years we see that both chlorinated components have trended lower. The MPS for o-chlorotoluene was exceeded in upgradient well MW-021S. Though well 21S increase in chlorotoluene was significant when compared to the previous sampling events it remains lower than values dating back to 1996 (see Time-Series graph). The selected results of October 2003 are compared to last quarter's results of April 2003 in Table 1.

Table 1
Monitoring Results for Selected Wells Exceeding the MPS
(units as ppb)

Well	1,2-Dichlorobenzene (MPS=94)		Chlorobenzene (MPS=1700)	
Bulkhead	April 2003	October 2003	April 2003	October 2003
MW-002S	66	500	2000	7000
P-035S	97	240	280	610
	O-Chlorotoluene (MPS = 1500)			
Upgradient	April 2003	October 2003		
MW-021S	72	3300		

The two bulkhead wells that exceeded the MPSs in 2003 are located at the southern end of the bulkhead and have experienced increases in contamination of chlorinated aromatics since the last half of 1999 when Ciba placed into service new extraction well PW-130. Groundwater flux moving to PW-130 may be influencing these two monitor wells. The new extraction well PW-130 pumps on average 22 GPM versus the 3 GPM for next nearest extraction well, PW-120 (see well location map on p.iii). Extraction well PW-110 remains diminutive in contamination and may be a potential candidate for a future shut down leaving the remaining two extraction wells to capture the contamination south of the former walk bridge.

The next monitoring episode is scheduled for April 2004.

2.0 OBJECTIVE

The objective of the monitoring program is to evaluate the Groundwater Extraction and Treatment System (GETS) on controlling releases to the Pawtuxet River while long-term corrective measures to areas of concern are being addressed, specifically SWMU-11.

3.0 INTRODUCTION

In August 1996, Ciba submitted to the USEPA a Pawtuxet River Corrective Measures Study (PRCMS) Report. In the PRCMS report (Section 3.5.1, page 3-12) Ciba proposed to measure groundwater elevations in the former Production area quarterly during the first two years following startup of the groundwater capture system and then semiannually until the groundwater capture and pretreatment system were shutdown.

Therefore, groundwater elevation data is collected from 23 wells to show if shallow contaminated groundwater in the former Production area is hydraulically controlled from discharging into the Pawtuxet River.

Inclusive of the PRCMS Ciba also proposed to monitor groundwater quality at the Facility. Groundwater is sampled semiannually from 12 selected overburden-monitor wells to evaluate changes in groundwater quality, specifically for the 5 chemicals of concern.

4.0 MEDIA PROTECTION STANDARDS

During the RCRA Facility investigation an MPS¹ was developed for each of five chemical contaminants detected in the former Production Area groundwater. These contaminants and their respective MPSs are summarized in Table 2 and discussed in detail in the PRCMS Report, Section 2.4.1.

¹ From the Public Health and Environmental Risk Evaluation (PHERE) that concluded the sole receptor impacted by contaminated groundwater were benthic invertebrates in the shallow sediments of the Pawtuxet River.

Table 2
Media Protection Standards
of Chemical Of Concern
CIBA-GEIGY, Cranston R.I. Facility
Former Production Area

Compound	MPS Concentration (ppb)
1,2-dichlorobenzene	94
chlorobenzene	1700
ortho-chlorotoluene	1500
toluene	1700*
xylenes	76

* Rhode Island Groundwater Objective GB - Groundwater classified as GB has been designated by the Rhode Island Department of Environmental Management (RIDEM) as not suitable for public or private drinking water use.

5.0 SEMIANNUAL MONITORING RESULTS

This report summarizes the groundwater quality results for the COC sampling that was performed October 2-3, 2003. The COC data are compared to previous sampling rounds dating back to March 1996, when semiannual monitoring activities were initiated. Also in this report are results of the hydraulic monitoring performed on October 1, 2003. The current hydraulic results are compared to pre-pumping baseline conditions dated September 30, 1993 (see Appendix A).

5.1 Hydraulic Monitoring

Piezometric contours for the overburden aquifer were created using data collected from 23 groundwater monitor wells and 3 extraction wells using Golden Software, Inc., SURFER FOR WINDOWS, Version 5.01 software.

The tabulated groundwater elevation data and the associated potentiometric contours, Figures 1 and 2, are included in Appendix A.

The kriging contour algorithm was used as a best fit method of approximating the directional groundwater flow pattern. The baseline results in Figure 1 show groundwater flow from northwest to southeast to the Pawtuxet River. Figure 2 shows the effect of the 3 extraction wells on the groundwater flow. Well PW-110 north of the walk bridge shows groundwater capture at present pumping capacity 37 GPM; the second and third extraction wells, PW-120 (3 GPM) and PW-130 (22 GPM), are capturing the plume along the bulkhead south of the

walk bridge. Together the 3 wells are capturing the groundwater plume that would otherwise pass by the bulkhead to the Pawtuxet River.

The hydraulic capture along the bulkhead is discussed in detail in the report "Capture Zone Analysis, Former Production area, Cranston, Rhode Island" dated July 7, 2000.

5.2 Monitoring for Chemicals of Concern (COC)

Eleven wells were sampled as part of the semiannual sampling program. The wells are divided into three main groups; shown on the Location Map in Section iii of this report. The COC analytical results are tabulated and included in Table 3 at the end of this section.

Three wells, MW-004S, 012S, and 021S are designated upgradient to the bulkhead wells. Well MW-021S, which is due west of the major plume continues to show the presence of contamination. Though the well is upgradient by hydrology it falls short by the presence of contamination, however, it will remain a designated upgradient well.

Results for the 6 bulkhead wells show the presence of varying levels of chlorobenzene except for P-038S, a well furthest from the contamination, and north of the former walk bridge. Also present is 1,2-dichlorobenzene at the southern bulkhead wells MW-002S, and P-035S. Both contaminants are present in concentrations that exceed the MPSs.

Well MW-002S is within close proximity to pumping well PW-120. Both wells show high concentration of contamination and are located at the southeastern section of the property. Increases of contamination at MW-002S were first observed in April 2000 along with wells MW-001S and P-035S. This increase followed the introduction of the new extraction well PW-130 in December 1999.

The "P" wells, 036S, 037S, and, 038S north of the former walk bridge have not changed much over the past 5 years. Chlorobenzene remains prominent for these wells except for P-038S, where non-detect results for all COC contaminants are now typical.

The in-river wells are located beyond the bulkhead in the Pawtuxet River. Two in-river wells were sampled and a third well, SW-130, was not sampled due to a blockage within the well casing. Ciba has made a request to the EPA to discontinue monitoring this well. It should be noted that well SW-130 has not shown any significant amounts of contamination since April 2000. Well SW-120 shows a presence of chlorobenzene at 44 ppb a result typical for this well when viewed over the past 6 years of monitoring. Well SW-110 can show the presence of chlorobenzene at very low levels, at present 1 ppb, a considerable improvement over the years

when chlorobenzene would range from 1000-2500 ppb. Since 2001 the in-river wells have remained almost free of contamination a reflection of the success of the GETS.

Table 3

Monitoring Results for October 2-3, 2003
Chemicals Of Concern
(as ppb)

Well Designation	Well Number	MPS	94	1700	1500	1700	76
			1,2-Dichloro-Benzene	Chloro-Benzene	O-Chloro-Toluene	Toluene	Xylenes
Upgradient	MW-004S		6	11	72	1 U	4
	MW-012S		1 U	1 U	1 U	1 U	1 U
	MW-021S		6	10	3300	38	72
Bulkhead	MW-001S		10 U	1300	10 U	10 U	10 U
	MW-002S		500	7000	50 U	120	50 U
	P-035S		240	610	67	10 U	10 U
	P-036S		10 U	420	10 U	10 U	10 U
	P-037S		10 U	350	10 U	10 U	10 U
	P-038S		1 U	1 U	1 U	1 U	1 U
In-River	SW-110		1 U	1	1 U	1 U	1 U
	SW-120		1 U	44	1 U	1 U	1 U
	SW-130		NA	NA	NA	NA	NA
Extraction	PW-110		1 U	23	23	1 U	1 U
	PW-120		3300	2200	130	50 U	50 U
	PW-130		20	160	120	22	10 U

U = Non-detect with detection limit given

J = Estimated value

NA = Not Available, sample not taken. Well blockage

MPS Exceedance

6.0 DISCUSSION

The October 2003, Certificate of Analysis by R.I. Analytical is included in Appendix E. The cumulative results from 1996 to the present for 12 wells and 5 COCs are included as Tables 3, 4, and 5 in Appendices B, C, and D respectively. The cumulative results of each COC are plotted as Time-Series graphs for a better perception of trends over the sampling history since the inception of the GETS in September 1995. These graphs are also found in the respective Appendices B, C, and D.

Trends in all COCs are apparent at well MW-004S. In well MW-004S the trend in all five contaminants tracked in the Time-series graphs are approaching non-detect if not already there.

Bulkhead wells MW-002S and P-035S exceed the MPS values for either 1,2-dichlorobenzene and/or chlorobenzene. Well P-035S is exceeding the MPS in 1,2-dichlorobenzene; however, a significant reduction is observed from the previous highs above 8000 ppb to the present 240 ppb. Well MW-002S exceeds the MPSs for both contaminants. While both contaminants are up in the latest sampling event the overall trend is down.

The 2 of 3 in-river wells that were sampled are generally low to non-detect for contamination. These wells located beyond the bulkhead in the Pawtuxet River have consistently shown improvement since Ciba began the operation of the GETS.

7.0 CONCLUSION

Groundwater quality in the former Production Area continues to improve over time. Groundwater quality as measured by an exceedance of the MPSs of the selected COC remains under pressure due to the presence of 1,2-dichlorobenzene and chlorobenzene. This latest sampling event identified two wells along the bulkhead having contamination that exceeds the proposed media protection standards for 1,2-dichlorobenzene and chlorobenzene. Both wells are in the extreme southeast part of the property. The two wells may be experiencing increased contamination due to the operation of a new extraction well that places the wells between the pumping well and the contamination. Upgradient well MW-021S saw a spike up in o-chlorobenzene, though overall the trend for this contaminant at this well is down. The reduced contamination observed in the wells at the northern end of the bulkhead and the lack of contamination found in extraction PW-110, may represent an opportunity for a future trial shutdown of this pumping well.

The next well sampling is scheduled for April 2004.

APPENDIX A

TABULATED

GROUNDWATER ELEVATION DATA

AND

POTENTIOMETRIC CONTOURS

**CIBA SPECIALTY CHEMICALS CORPORATION
(FORMERLY CIBA-GEIGY CORPORATION)**
180 MILL STREET
CRANSTON, RI

GROUNDWATER MONITORING

October 1, 2003 September 30, 1993

MONITORING WELL	TOC MSL FEET	TOC TO WATER FEET	GW ELEVATION MSL FEET	GW ELEVATION MSL FEET
PW-110	15.72	17.47	-3.55	NA
PW-120	14.25	13.70	-2.28	NA
PW-130	16.59	20.10	-3.78	NA
MW-001S	15.04	8.38	6.34	9.39
MW-002S	14.46	8.68	7.07	9.21
MW-003S	16.61	8.35	7.57	7.96
MW-004S	21.29	12.04	4.36	10.72
MW-010S	22.62	12.30	3.82	11.34
MW-012S	22.54	12.50	3.62	10.54
MW-013S	18.44	10.10	5.99	9.83
MW-020S	21.94	11.44	4.70	11.53
MW-022S	16.87	8.25	7.64	9.63
MW-023S	20.71	dry	4.10	9.41
MW-024S	21.04	dry	5.87	10.89
MW-034S	18.85	9.20	6.48	10.4
P-001S	16.41	10.00	10.94	9.17
P-002S	13.85	7.90	8.12	8.38
P-003S	15.45	8.27	7.52	7.09
P-004S	19.92	10.10	6.51	11.07
P-005S	21.18	11.90	4.22	10.68
P-006S	23.62	13.85	2.29	10.39
P-034S	17.15	8.25	7.07	10.12
P-035S	15.32	9.70	6.22	8.51
P-036S	15.91	10.00	5.84	8.62
P-037S	15.69	10.05	5.94	8.96
P-038S	16.19	8.52	7.41	8.74

NA - Not Available

Figure 1

CIBA SPECIALTY CHEMICALS CORPORATION
CRANSTON, RI FACILITY
FORMER PRODUCTION AREA

Pre-Pump & Treat Potentiometric Surface Map
September 30, 1993

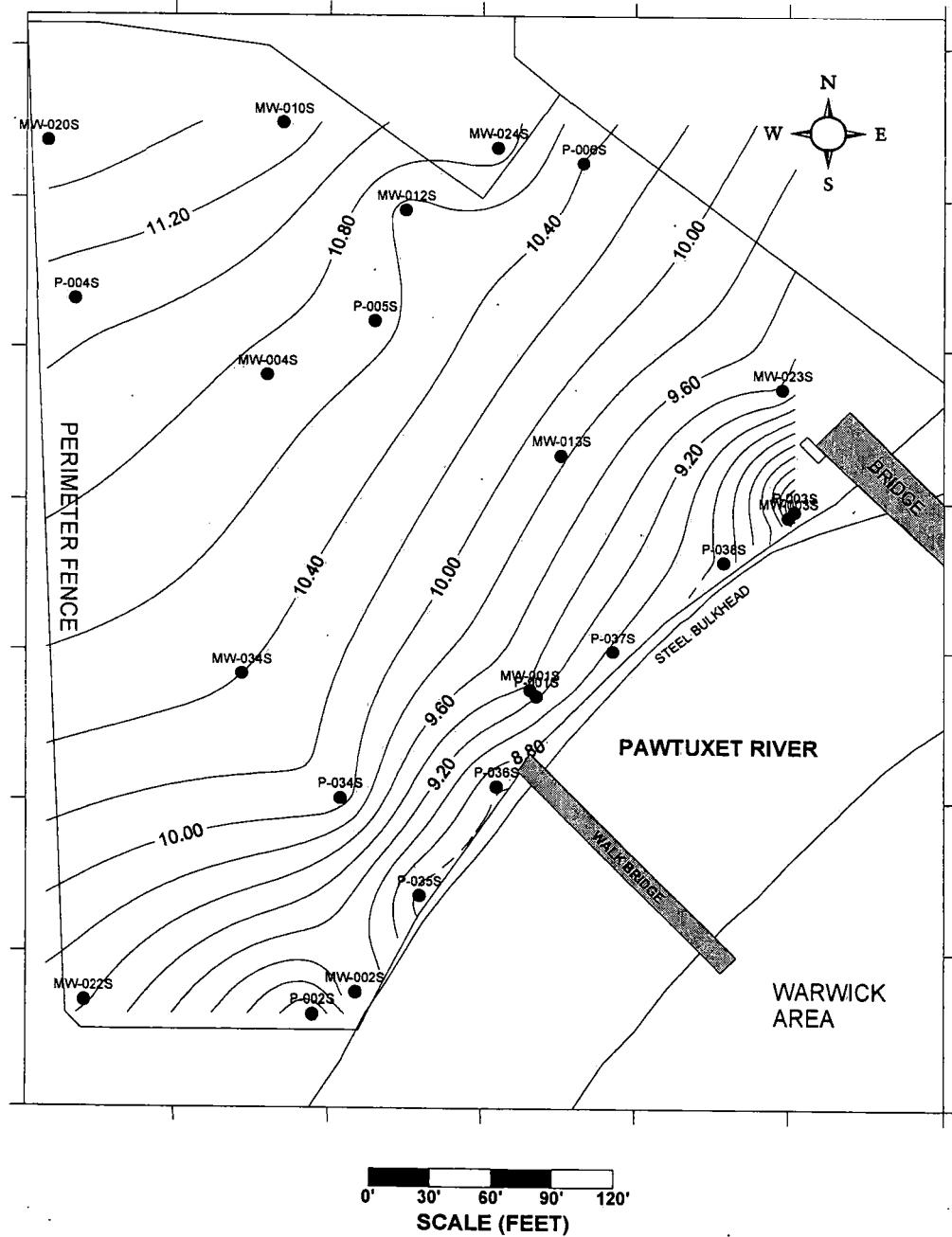
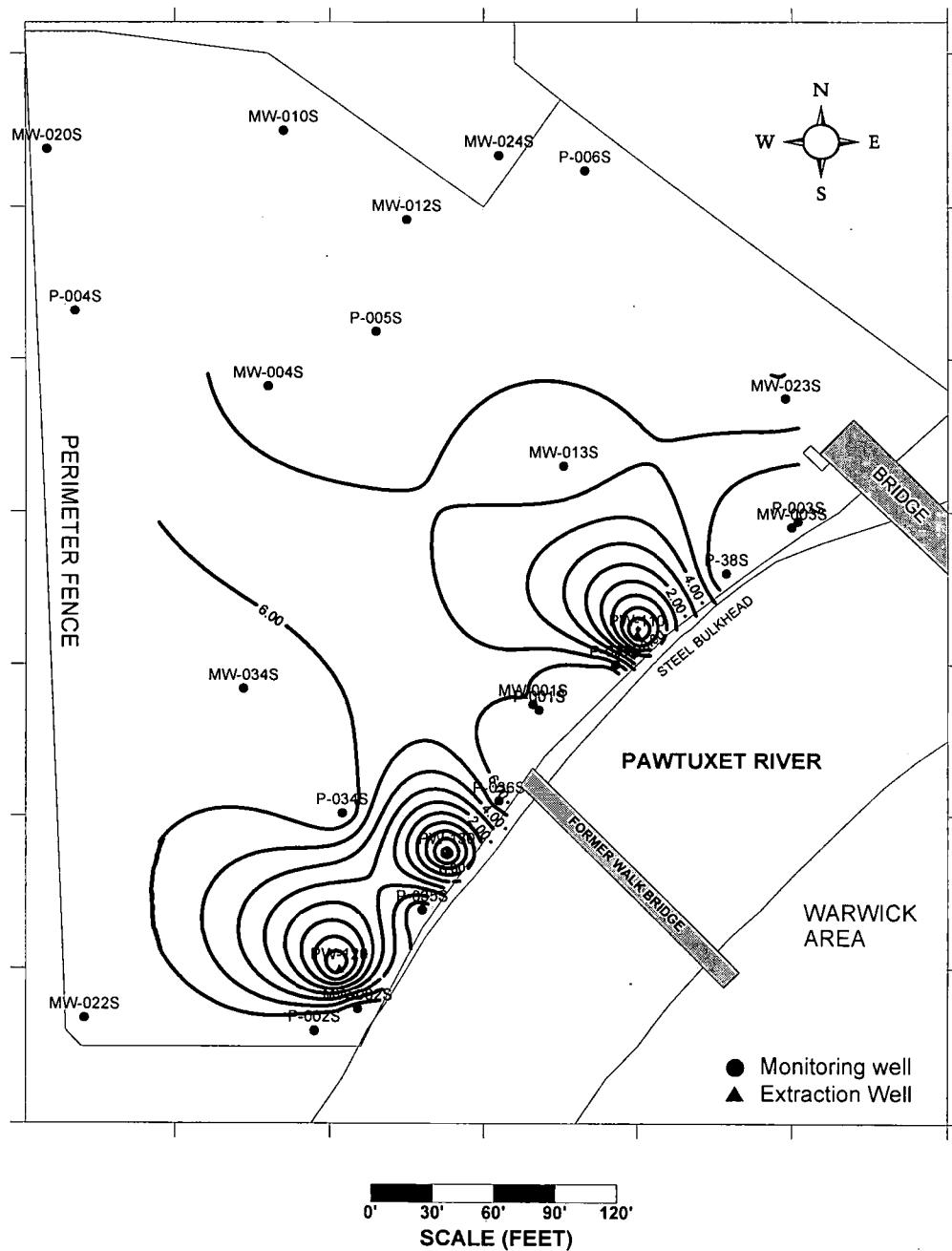


Figure 2

**CIBA SPECIALTY CHEMICALS CORPORATION
CRANSTON, RI FACILITY
FORMER PRODUCTION AREA**

Potentiometric Surface Map
October 1, 2003



APPENDIX B

TIME-SERIES

FOR

UPGRADIENT WELLS

Table 3
UPGRADIENT WELLS
Cumulative Results for Chemicals Of Concern
(Units in ppb)

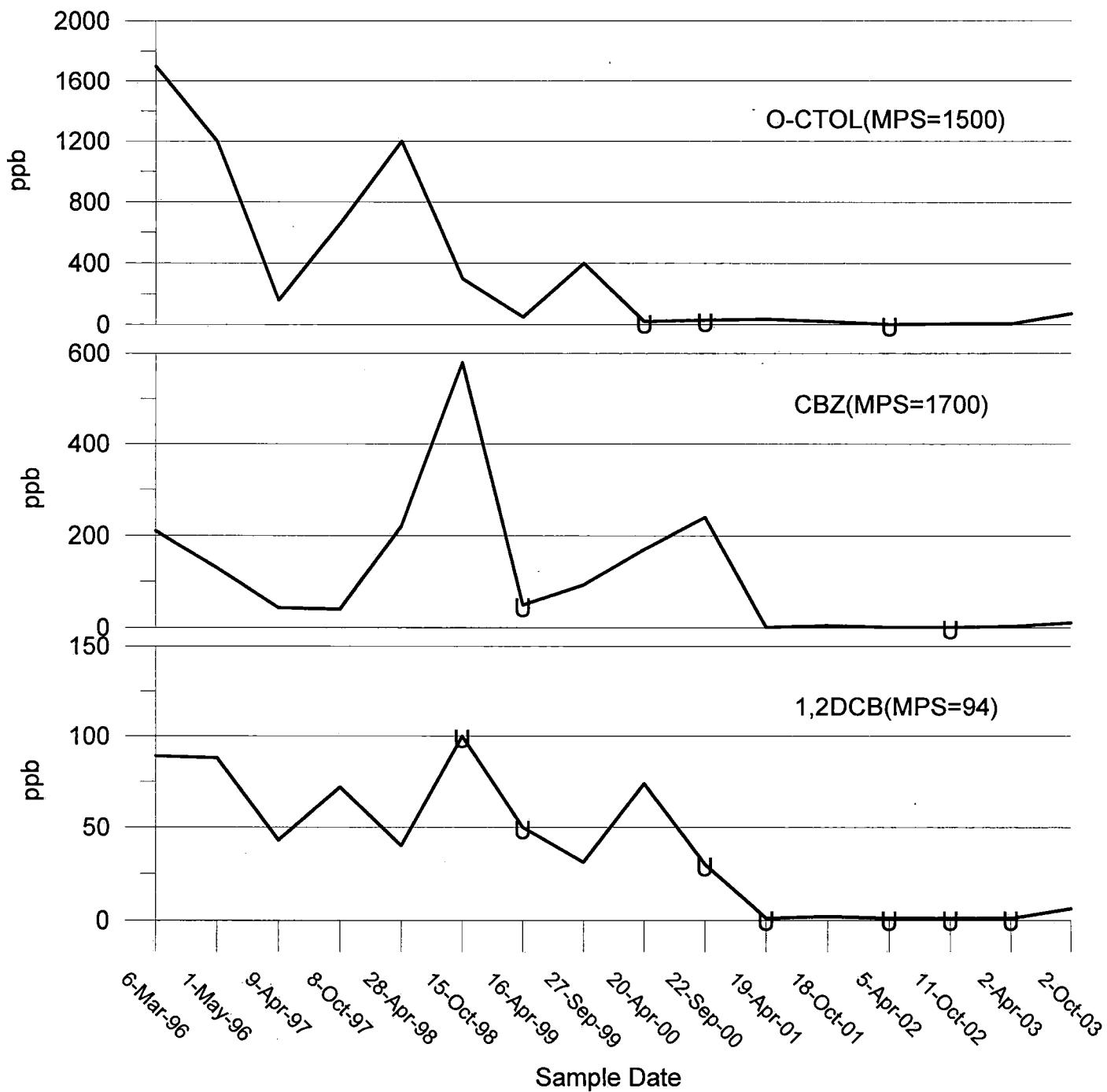
Well No.	Date Sampled	1,2-Dichloro-benzene	Chloro-benzene	o-Chloro-toluene	Toluene	Xylenes
MPS		94	1700	1500	1700	76
MW-004S	6-Mar-96	89	210	1700	2100	300
MW-004S	1-May-96	88	130	1200	1500	160
MW-004S	9-Apr-97	43	44	160	88	100
MW-004S	8-Oct-97	72	41	660	370	480
MW-004S	28-Apr-98	40	220	1200	2700	130
MW-004S	15-Oct-98	100 U	580	300	100 U	100 U
MW-004S	16-Apr-99	50 U	50 U	50	50 U	730
MW-004S	27-Sep-99	31	93	400	20 U	79
MW-004S	20-Apr-00	74	170	20 U	84	20 U
MW-004S	22-Sep-00	30 U	240	30 U	30 U	30 U
MW-004S	19-Apr-01	1 U	1	36	1 U	2
MW-004S	18-Oct-01	2	5	20	1 U	1
MW-004S	5-Apr-02	1 U	1	1 U	1 U	1 U
MW-004S	11-Oct-02	1 U	1 U	5	1 U	1 U
MW-004S	2-Apr-03	1 U	3	5	66	4
MW-012S	5-Mar-96	4.3 U	2.4 J	2 U	2.8 U	75
MW-012S	2-May-96	4.3 U	1.5 J	2 U	2.8 U	42
MW-012S	10-Apr-97	1 U	1 U	1 U	1 U	1 U
MW-012S	8-Oct-97	1 U	1 U	1 U	1 U	12
MW-012S	28-Apr-98	1 U	1 U	1 U	1 U	65
MW-012S	15-Oct-98	10 U	10 U	10 U	10 U	87
MW-012S	16-Apr-99	10 U	12	10 U	10 U	24
MW-012S	27-Sep-99	58	1 U	1 U	1 U	6
MW-012S	20-Apr-00	1 U	1 U	1 U	1 U	1
MW-012S	22-Sep-00	1 U	2	1 U	1 U	1
MW-012S	18-Apr-01	1 U	1 U	1 U	1 U	25
MW-012S	18-Oct-01	1 U	3	1 U	1 U	1 U
MW-012S	5-Apr-02	1 U	1 U	1 U	1 U	1 U
MW-012S	11-Oct-02	1 U	1 U	1 U	1 U	1 U
MW-012S	2-Apr-03	1 U	1 U	1 U	1 U	2
MW-021S	6-Mar-96	43 U	30 U	480	12 J	34 U
MW-021S	1-May-96	22 U	5 J	820	15	17 U
MW-021S	10-Apr-97	1 U	1 U	120	1	6
MW-021S	27-Oct-97	30	49	24000	20000	1600
MW-021S	28-Apr-98	1 U	1 U	54	1 U	1 U
MW-021S	15-Oct-98	100 U	100 U	7900	2500	580
MW-021S	15-Apr-99	50 U	50 U	9000	50 U	520
MW-021S	27-Sep-99	40 U	40 U	8100	40 U	110
MW-021S	20-Apr-00	40 U	40 U	11000	40 U	40 U
MW-021S	22-Sep-00	500 U	500 U	16000	500 U	500 U
MW-021S	19-Apr-01	10 U	10 U	440	10 U	10 U
MW-021S	18-Oct-01	50 U	50 U	12000	270	210
MW-021S	5-Apr-02	10 U	10 U	420	10 U	10 U
MW-021S	11-Oct-02	2	2	940	6	38
MW-021S	2-Apr-03	1 U	1 U	72	1 U	1

MPS = Media Protection Standard
U = Nondetect with detection limit given
J = Estimated value

Ciba Specialty Chemicals Corp
Cranston Rhode Island Facility
Time-Series Graph
Semiannual Monitoring

Well MW-004S
Upgradient Well

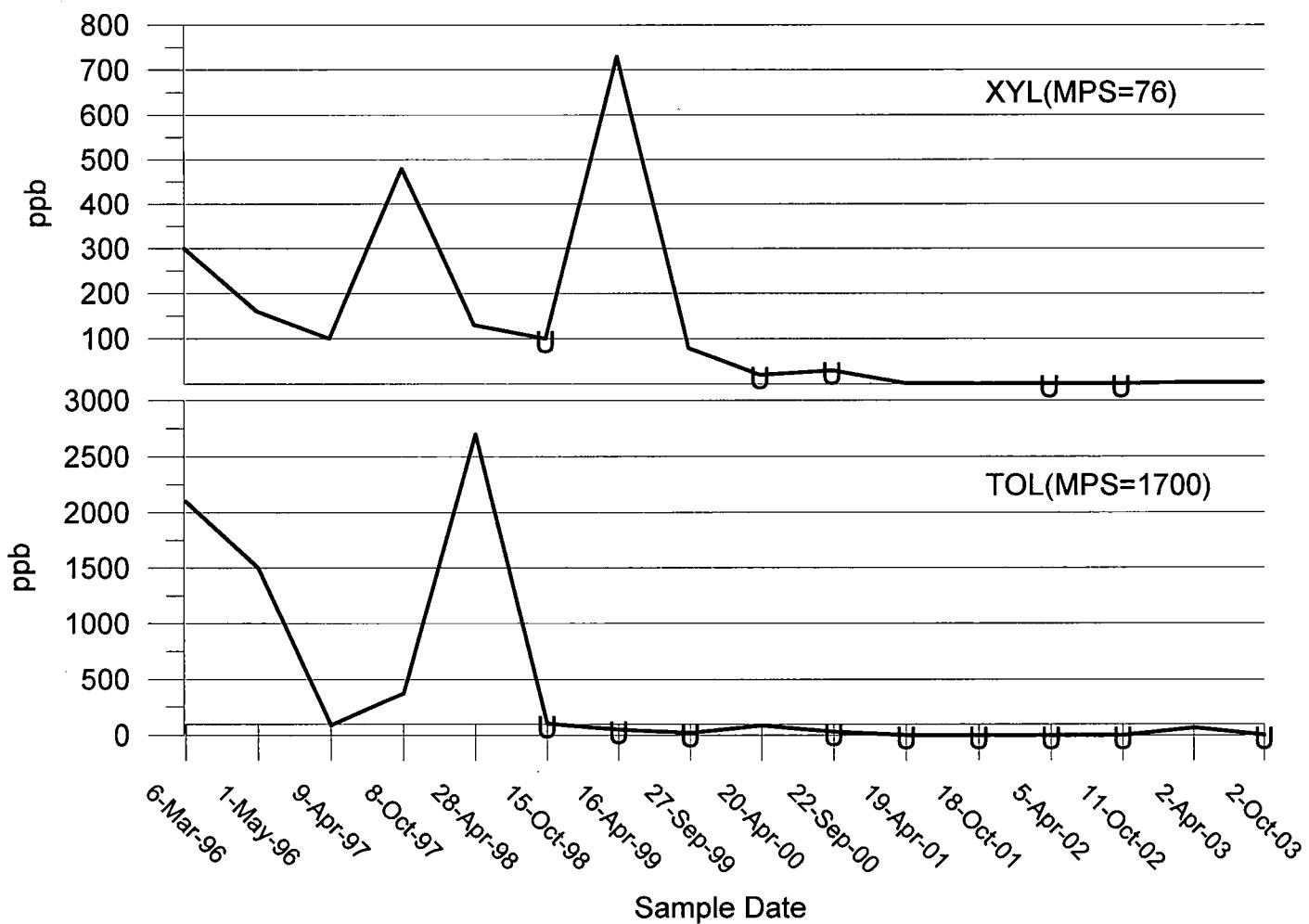
"U"=Nondetect
"J"=Estimated Value
MPS=Media Protection Std.



Ciba Specialty Chemicals Corp
Cranston Rhode Island Facility
Time-Series Graph
Semiannual Monitoring

Well MW-004S
Upgradient Well

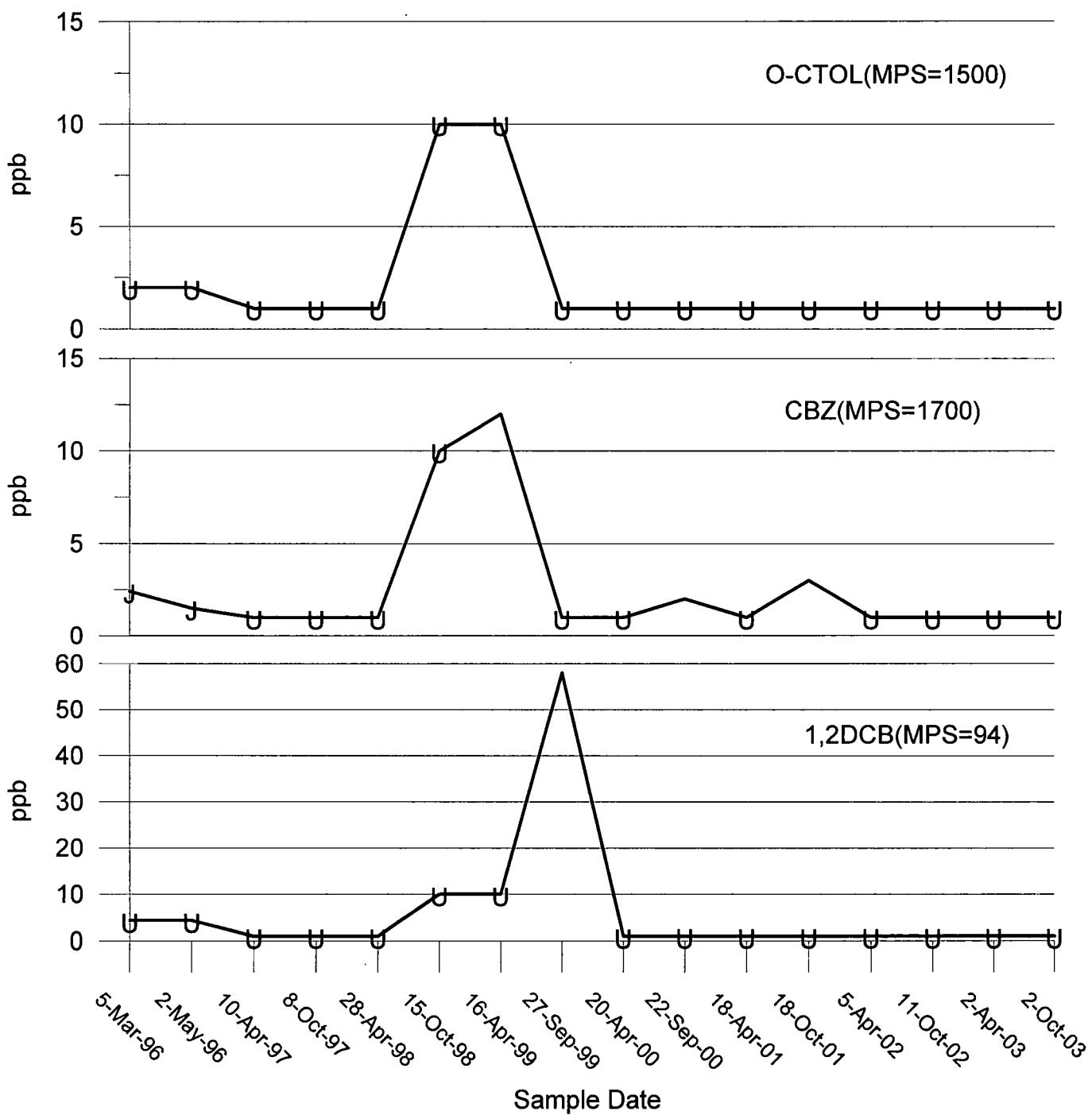
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Ciba Specialty Chemicals Corp
Cranston Rhode Island Facility
Time-Series Graph
Semiannual Monitoring

Well MW-012S
Upgradient Well

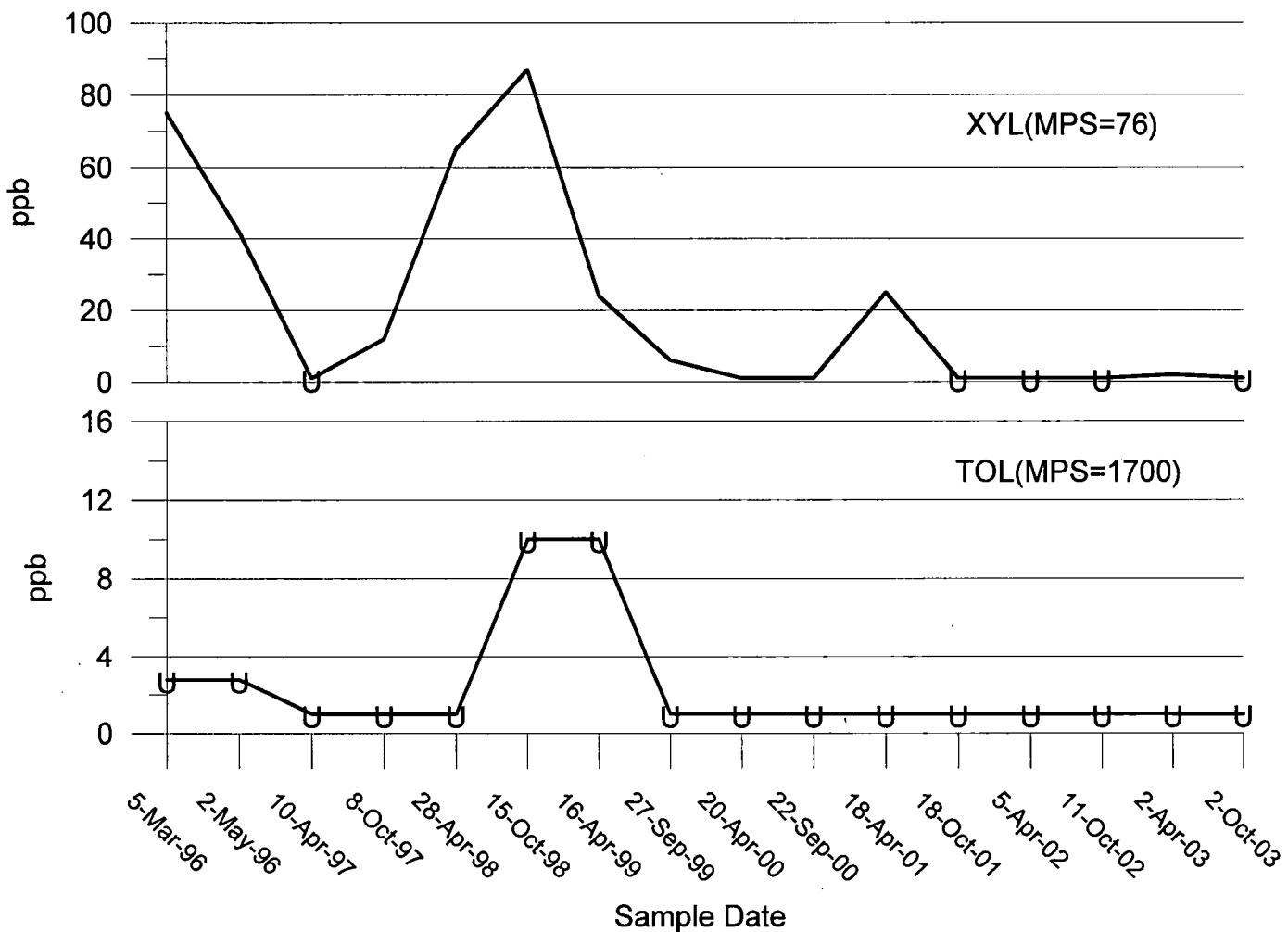
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Ciba Specialty Chemicals Corp
Cranston Rhode Island Facility
Time-Series Graph
Semiannual Monitoring

Well MW-012S
Upgradient Well

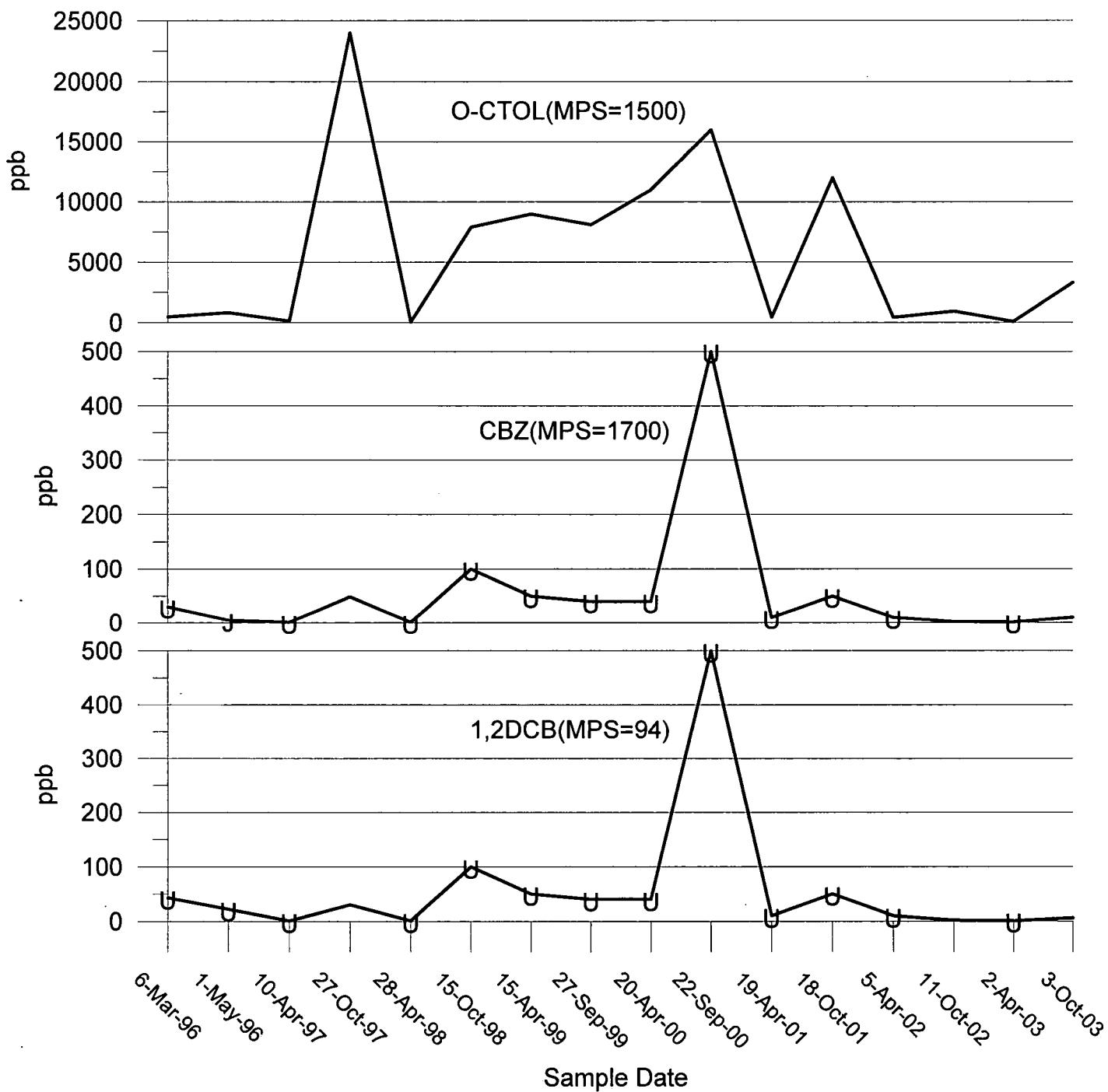
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Ciba Specialty Chemicals Corp
Cranston Rhode Island Facility
Time-Series Graph
Semiannual Monitoring

Well MW-021S
Upgradient Well

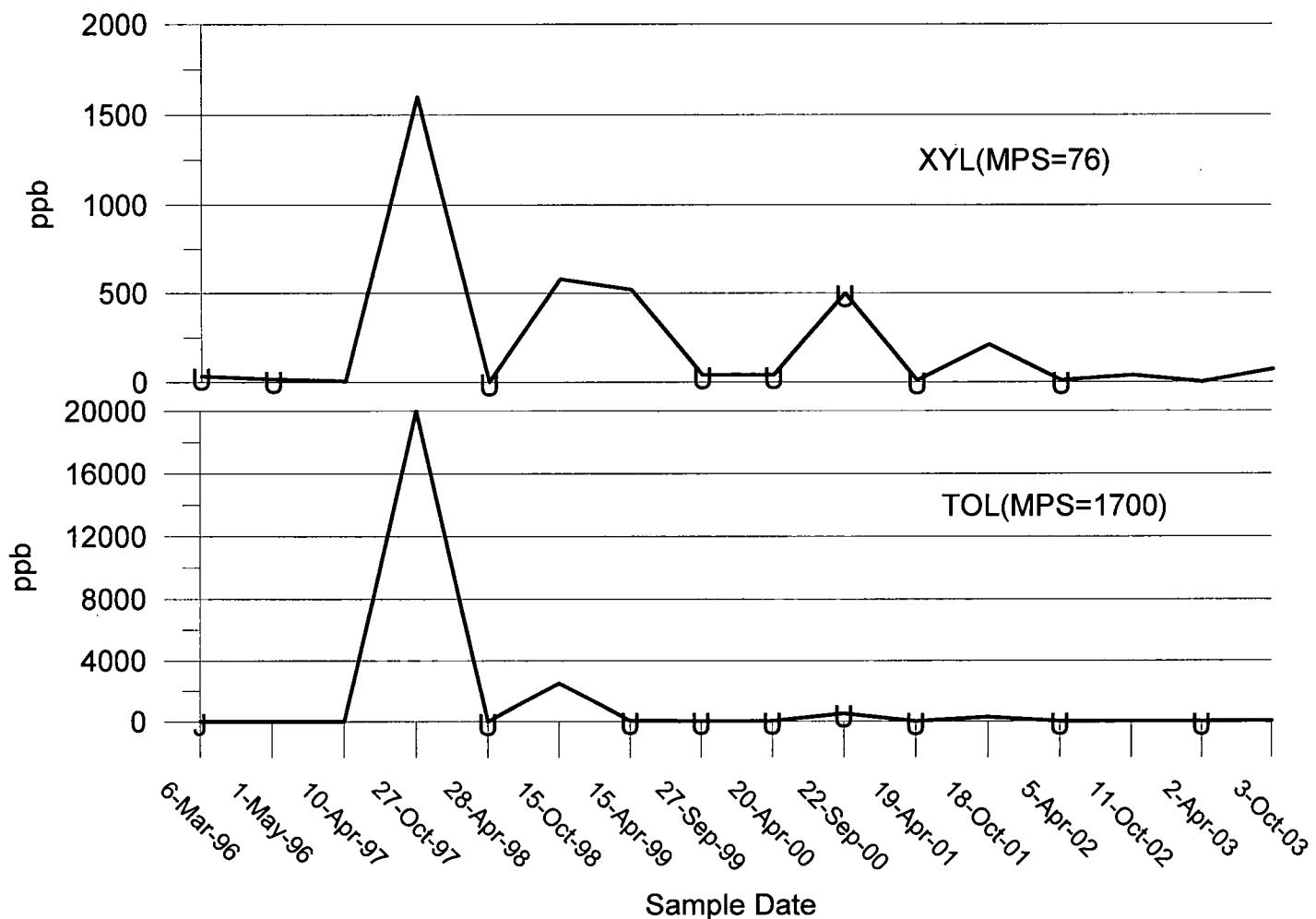
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Ciba Specialty Chemicals Corp
Cranston Rhode Island Facility
Time-Series Graph
Semiannual Monitoring

Well MW-021S
Upgradient Well

"U"=Nondetect
"J"=Estimated Value
MPS=Media Protection Std.



APPENDIX C
TIME-SERIES GRAPHS
FOR
BULKHEAD WELLS

Table 4
BULKHEAD WELLS
Cumulative Results for Chemicals Of Concern
(Units In ppb)

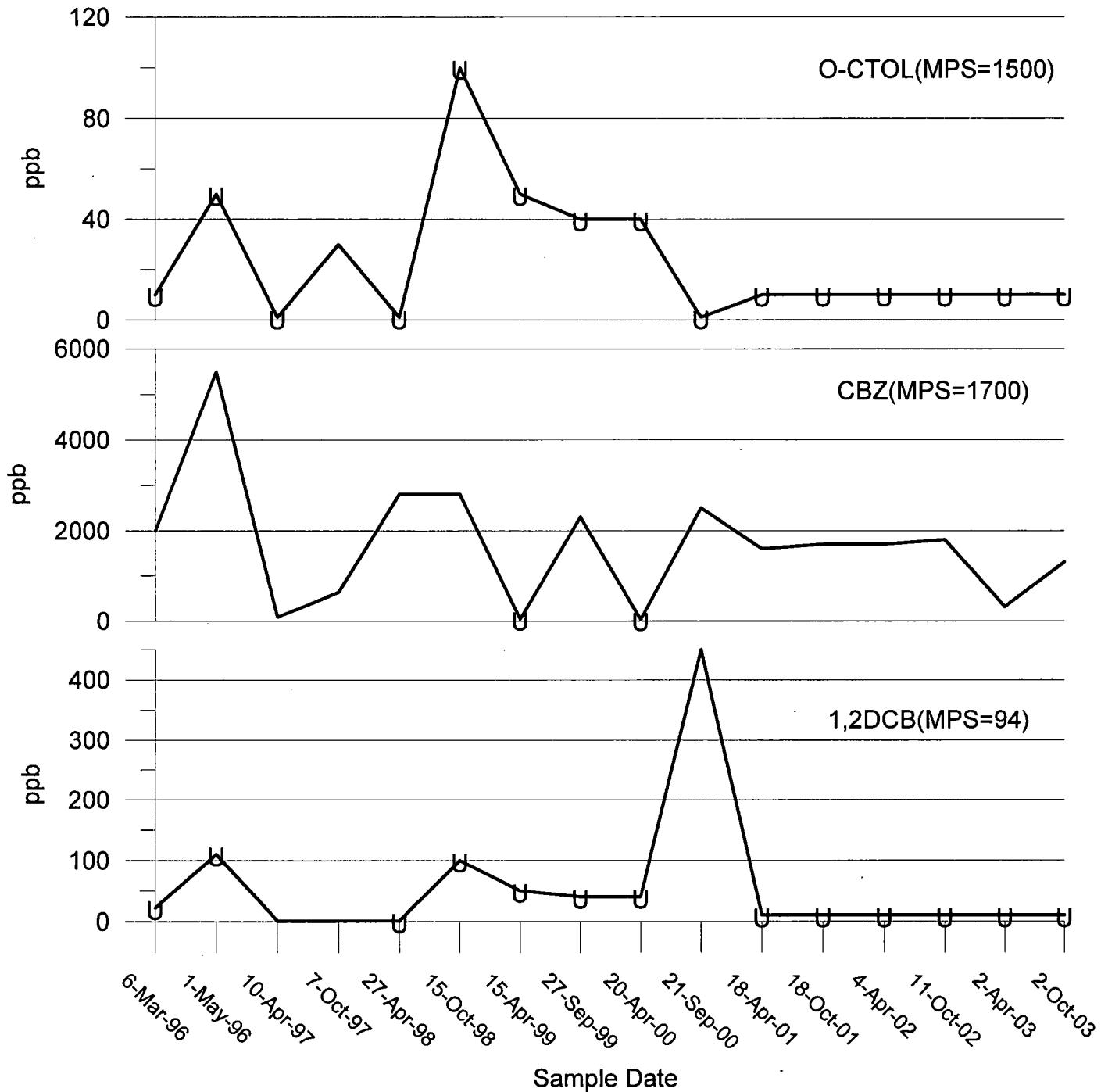
Well No.	Date Sampled	1,2-Dichloro-benzene	Chloro-benzene	o-Chloro-toluene	Toluene	Xylenes
MPS		94	1700	1500	1700	76
MW-001S	6-Mar-96	22 U	2000	10 U	16	18
MW-001S	1-May-96	110 U	5500	50 U	30 J	85 U
MW-001S	10-Apr-97	1	93	1 U	9	7
MW-001S	7-Oct-97	1	640	30	23	2
MW-001S	27-Apr-98	1 U	2800	1 U	1	2
MW-001S	15-Oct-98	100 U	2800	100 U	100 U	
MW-001S	15-Apr-99	50 U	50 U	50 U	50 U	
MW-001S	27-Sep-99	40 U	2300	40 U	40 U	40 U
MW-001S	20-Apr-00	40 U	40 U	40 U	40 U	40 U
MW-001S	21-Sep-00	450	2500	1 U	1 U	1 U
MW-001S	18-Apr-01	10 U	1600	10 U	10 U	10 U
MW-001S	18-Oct-01	10 U	1700	10 U	10 U	10 U
MW-001S	4-Apr-02	10 U	1700	10 U	10 U	10 U
MW-001S	11-Oct-02	10 U	1800	10 U	10 U	10 U
MW-001S	2-Apr-03	10 U	320	10 U	10 U	10 U
MW-001S	2-Oct-03	10 U	1300	10 U	10 U	10 U
MW-002S	5-Mar-96	340	3200	50 U	200	85 U
MW-002S	30-Apr-96	44 J	2500	50 U	52 J	85 U
MW-002S	8-Apr-97	20	64	1 U	46	18
MW-002S	7-Oct-97	90	440	100	97	31
MW-002S	27-Apr-98	22	500	1 U	88	28
MW-002S	15-Oct-98	28	5200	1 U	92	34
MW-002S	15-Apr-99	140	2280	10 U	420	33
MW-002S	27-Sep-99	43	2800	40 U	40 U	40 U
MW-002S	20-Apr-00	1340	12000	150	830	120
MW-002S	21-Sep-00	930	9400	500 U	500 U	500 U
MW-002S	18-Apr-01	50 U	1400	50 U	95	50 U
MW-002S	18-Oct-01	1800	12000	170	120	33
MW-002S	5-Apr-02	360	4700	100 U	230	50 U
MW-002S	11-Oct-02	360	8800	50 U	140	50 U
MW-002S	3-Apr-03	66	2000	50 U	200	50 U
MW-002S	3-Oct-03	500	7000	50 U	120	50 U
P-035S	8-Apr-97	22	74	1 U	4	12
P-035S	7-Oct-97	240	710	2	10	12
P-035S	27-Apr-98	42	360	1 U	2	10
P-035S	15-Oct-98	140	2100	10 U	130	80
P-035S	15-Apr-99	20	480	10 U	10 U	10 U
P-035S	27-Sep-99	40 U	40 U	40 U	40 U	40 U
P-035S	20-Apr-00	4580	77000	300	160	56
P-035S	21-Sep-00	6600	11000	500 U	500 U	500 U
P-035S	18-Apr-01	2000	2100	67	50 U	50 U
P-035S	18-Oct-01	9000	11000	310	81	34
P-035S	4-Apr-02	9600	8800	380	100 U	50 U
P-035S	11-Oct-02	1300	870	79	10 U	10 U
P-035S	3-Apr-03	97	280	11	10 U	10 U
P-035S	3-Oct-03	240	810	67	10 U	10 U
P-036S	6-Mar-96	22 U	440	10 U	14 U	17 U
P-036S	1-May-96	22 U	460	30	14 U	17 U
P-036S	8-Apr-97	1 U	72	1 U	1 U	2
P-036S	7-Oct-97	1 U	35	9	2	1 U
P-036S	27-Apr-98	1 U	260	1 U	1 U	1 U
P-036S	15-Oct-98	1 U	230	1 U	1 U	1
P-036S	15-Apr-99	10 U	200	10 U	10 U	10 U
P-036S	27-Sep-99	10 U	450	10 U	10 U	10 U
P-036S	20-Apr-00	1 U	290	1 U	1 U	1 U
P-036S	21-Sep-00	30 U	300	30 U	30 U	30 U
P-036S	18-Apr-01	10 U	280	10 U	10 U	10 U
P-036S	18-Oct-01	1 U	170	1 U	1 U	1 U
P-036S	4-Apr-02	1 U	230	1 U	1	1 U
P-036S	11-Oct-02	1	410	6	1 U	1 U
P-036S	3-Apr-03	10 U	210	10 U	10 U	10 U
P-036S	2-Oct-03	10 U	420	10 U	10 U	10 U
P-037S	9-Apr-97	2 U	54	16	1 U	1
P-037S	8-Oct-97	2	50	13	1 U	1 U
P-037S	28-Apr-98	2	420	.8	1 U	1 U
P-037S	15-Oct-98	30 U	540	30 U	30 U	30 U
P-037S	15-Apr-99	10 U	210	10 U	10 U	10 U
P-037S	27-Sep-99	10 U	660	10 U	10 U	10 U
P-037S	20-Apr-00	1 U	460	5	1 U	1 U
P-037S	21-Sep-00	30 U	370	30 U	30 U	30 U
P-037S	18-Apr-01	10 U	330	10 U	10 U	10 U
P-037S	18-Oct-01	2	240	1 U	1 U	1 U
P-037S	4-Apr-02	10 U	360	10 U	10 U	10 U
P-037S	11-Oct-02	10 U	420	10 U	10 U	10 U
P-037S	2-Apr-03	10 U	270	10 U	10 U	10 U
P-037S	2-Oct-03	10 U	350	10 U	10 U	10 U
P-038S	6-Mar-96	4.3 U	2.4 J	2 U	1.3 J	3.4 U
P-038S	1-May-96	4.3 U	1.2 J	2 U	2.8 U	3.4 U
P-038S	9-Apr-97	1 U	1 U	1 U	1 U	1 U
P-038S	8-Oct-97	1 U	1 U	1 U	1 U	1 U
P-038S	28-Apr-98	1 U	1 U	1 U	1 U	1 U
P-038S	15-Oct-98	1 U	2	1 U	1'U	1 U
P-038S	15-Apr-99	1 U	1 U	1 U	1 U	1 U
P-038S	27-Sep-99	1 U	1	1 U	1 U	1 U
P-038S	20-Apr-00	1 U	1 U	1 U	1 U	1 U
P-038S	21-Sep-00	1 U	1	1 U	1 U	1 U
P-038S	18-Apr-01	1 U	1 U	1 U	1 U	1 U
P-038S	18-Oct-01	1 U	6	1 U	1 U	1 U
P-038S	4-Apr-02	1 U	2	1 U	1 U	1 U
P-038S	11-Oct-02	1 U	1 U	1 U	1 U	1 U
P-038S	2-Apr-03	1 U	1 U	1 U	1 U	1 U
P-038S	2-Oct-03	1 U	1 U	1 U	1 U	1 U

MPS = Media Protection Standard
U = Nondetect with detection limit given
J = Estimated value

Ciba Specialty Chemicals Corp
Cranston Rhode Island Facility
Time-Series Graph
Semiannual Monitoring

Well MW-001S
Along Bulkhead

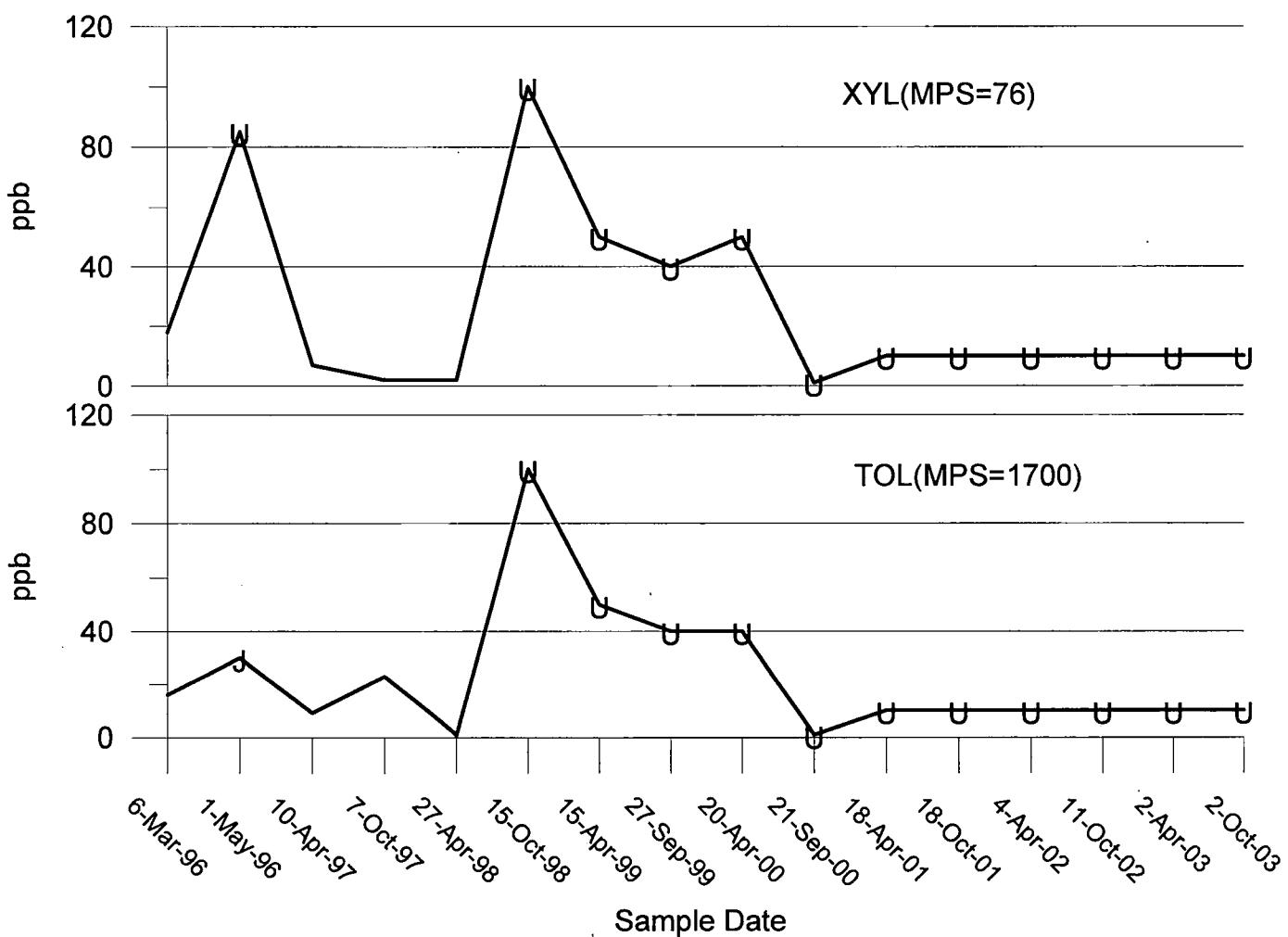
"U"=Nondetect
"J"=Estimated Value
MPS=Media Protection Std.



Ciba Specialty Chemicals Corp
Cranston Rhode Island Facility
Time-Series Graph
Semiannual Monitoring

Well MW-001S
Along Bulkhead

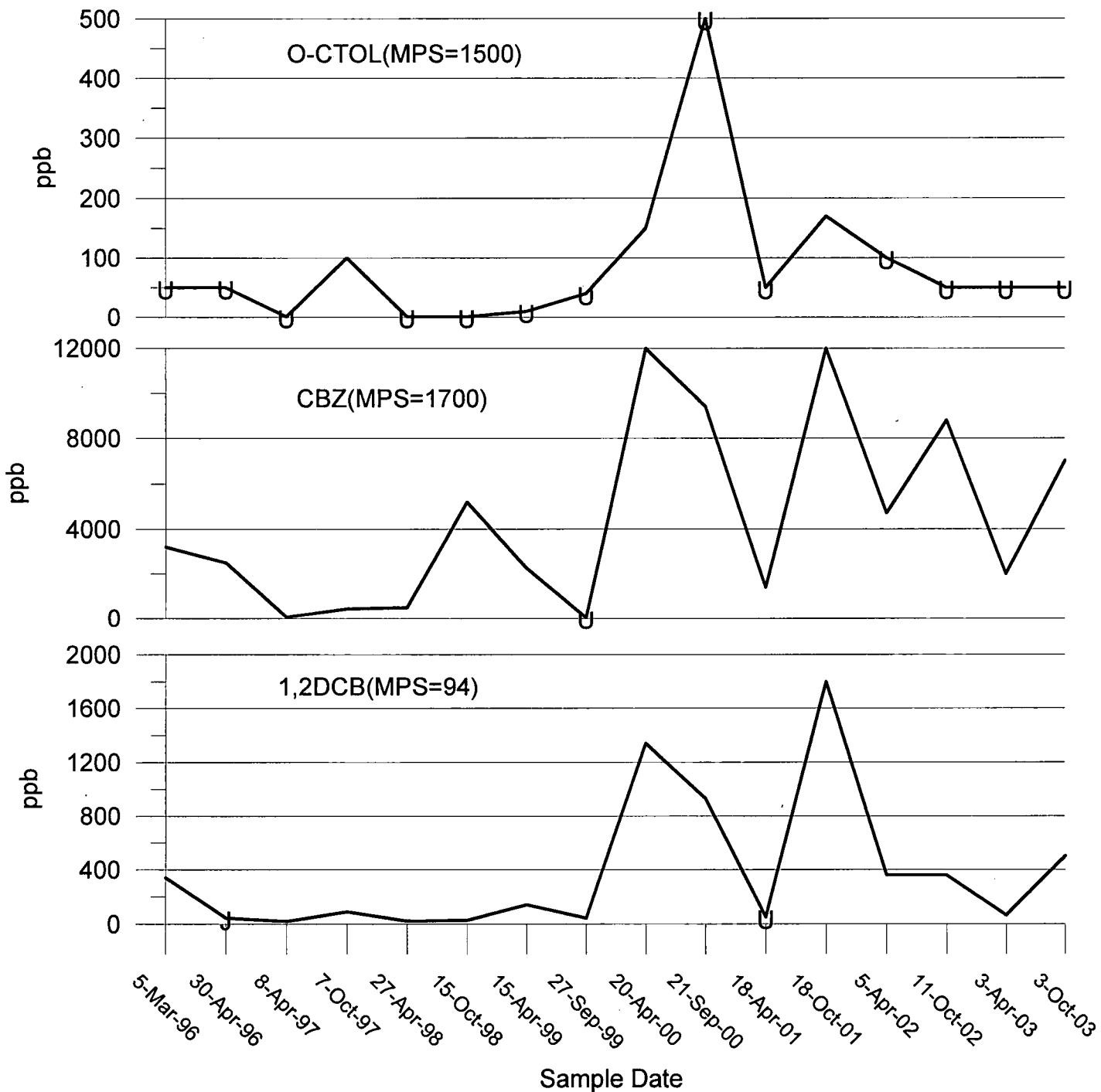
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"J"=Estimated Value
MPS=Media Protection Std.



Ciba Specialty Chemicals Corp
Cranston Rhode Island Facility
Time-Series Graph
Semiannual Monitoring

Well MW-002S
Along Bulkhead

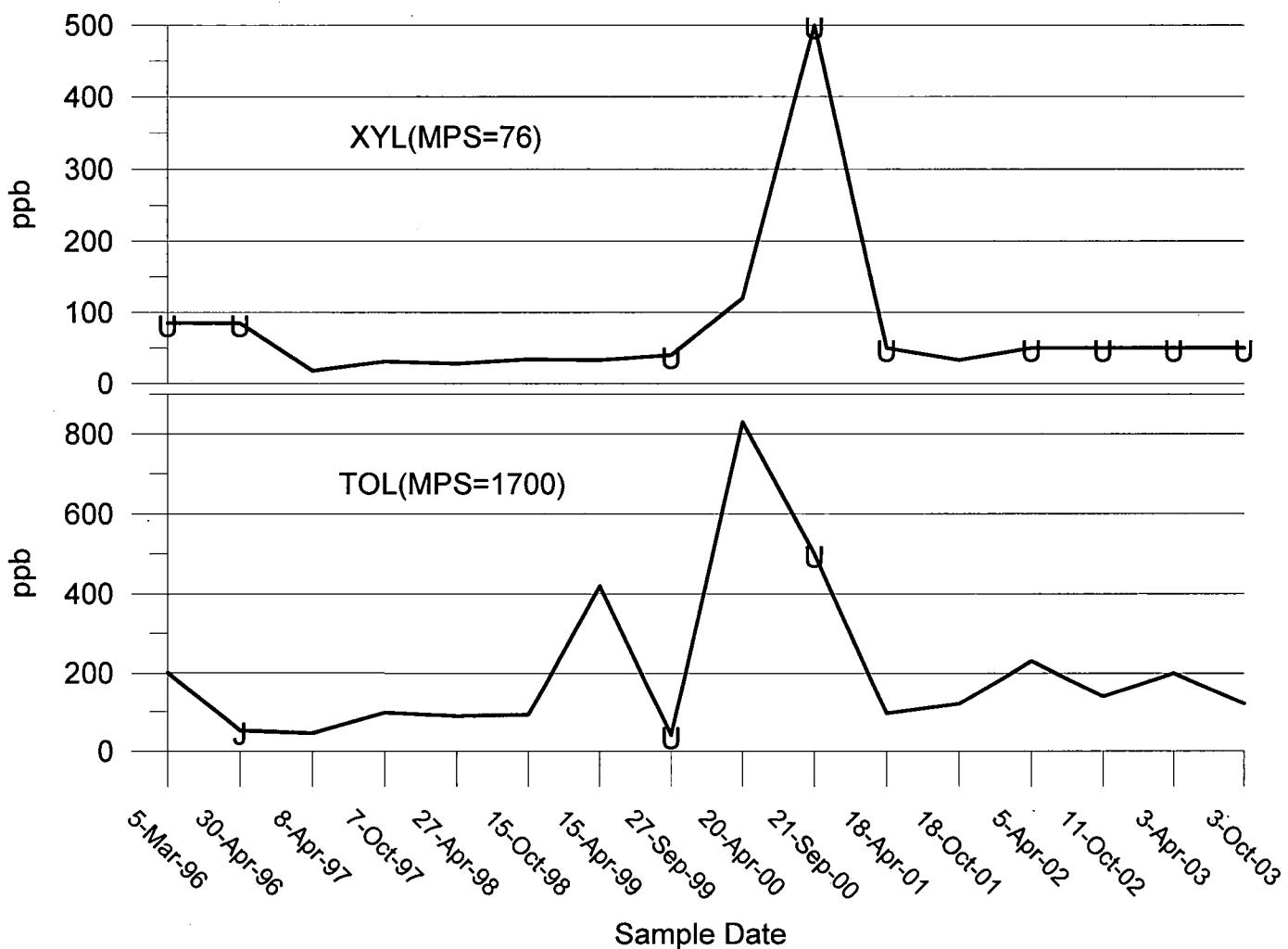
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"J"=Estimated Value
MPS=Media Protection Std.



Ciba Specialty Chemicals Corp
Cranston Rhode Island Facility
Time-Series Graph
Semiannual Monitoring

Well MW-002S
Along Bulkhead

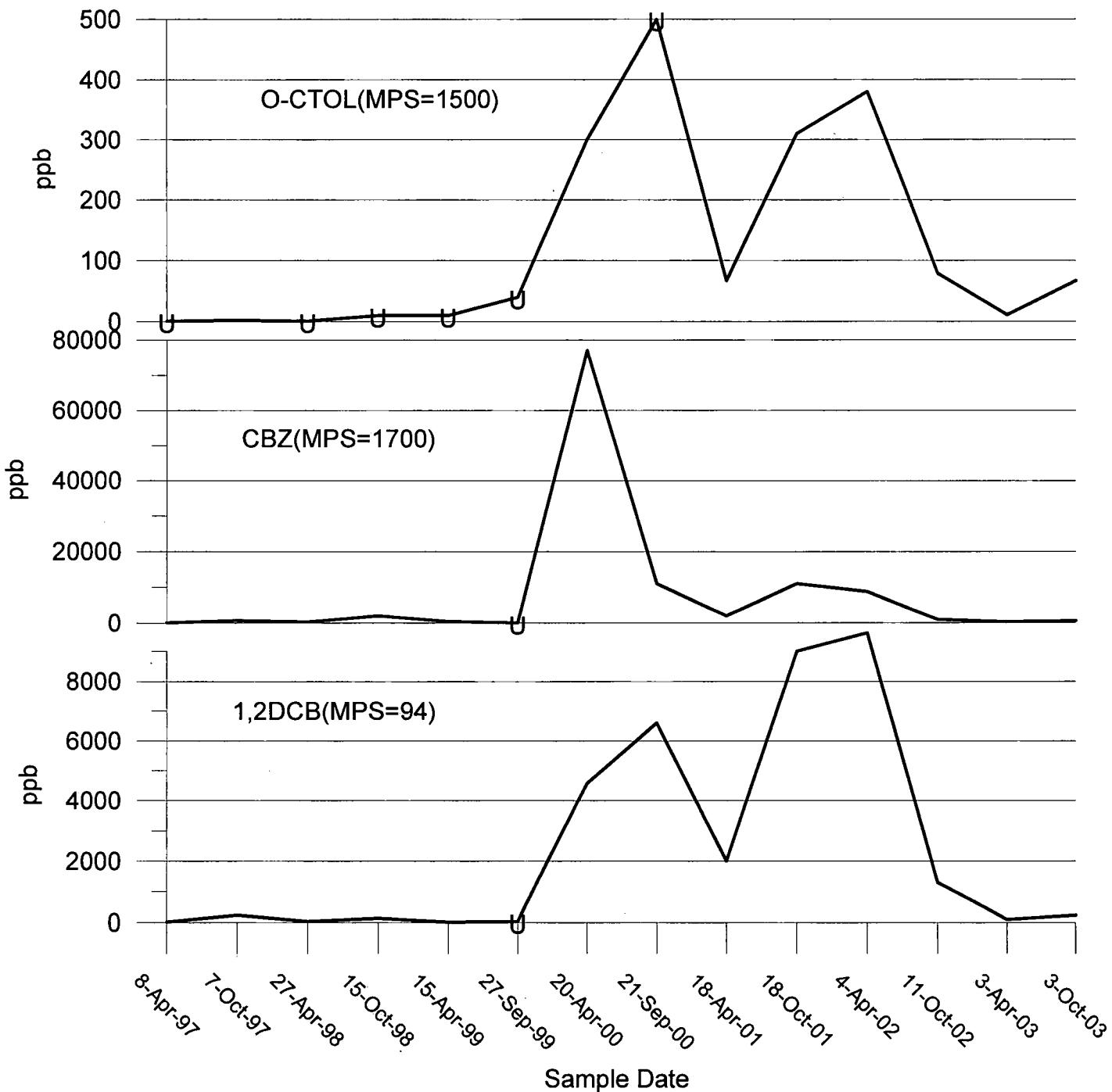
"U"=Nondetect
"J"=Estimated Value
MPS=Media Protection Std.



Ciba Specialty Chemicals Corp
Cranston Rhode Island Facility
Time-Series Graph
Semiannual Monitoring

Well P-035S
Along Bulkhead

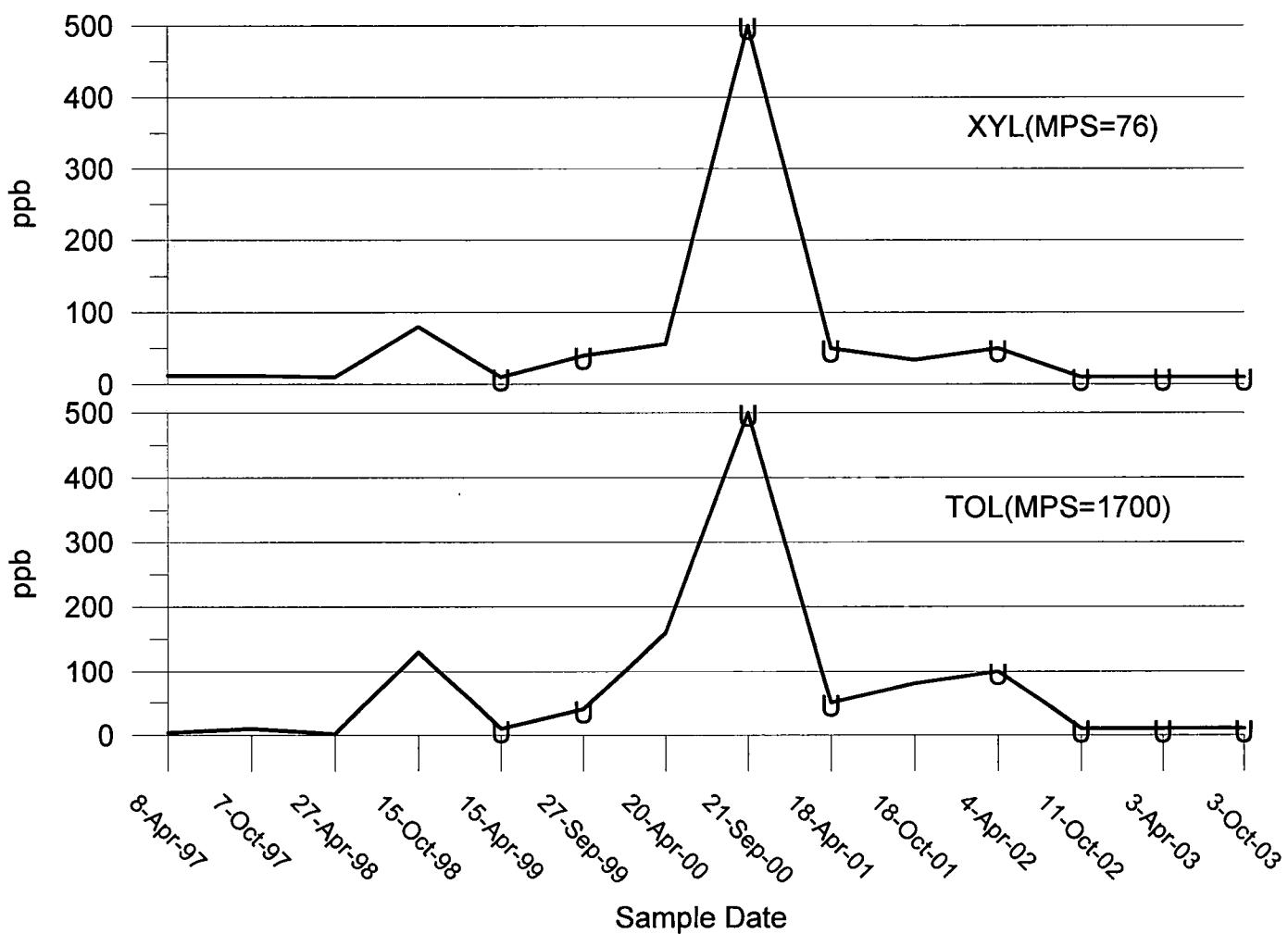
"U"=Nondetect
"J"=Estimated Value
MPS=Media Protection Std.



Ciba Specialty Chemicals Corp
Cranston Rhode Island Facility
Time-Series Graph
Semiannual Monitoring

Well P-035S
Along Bulkhead

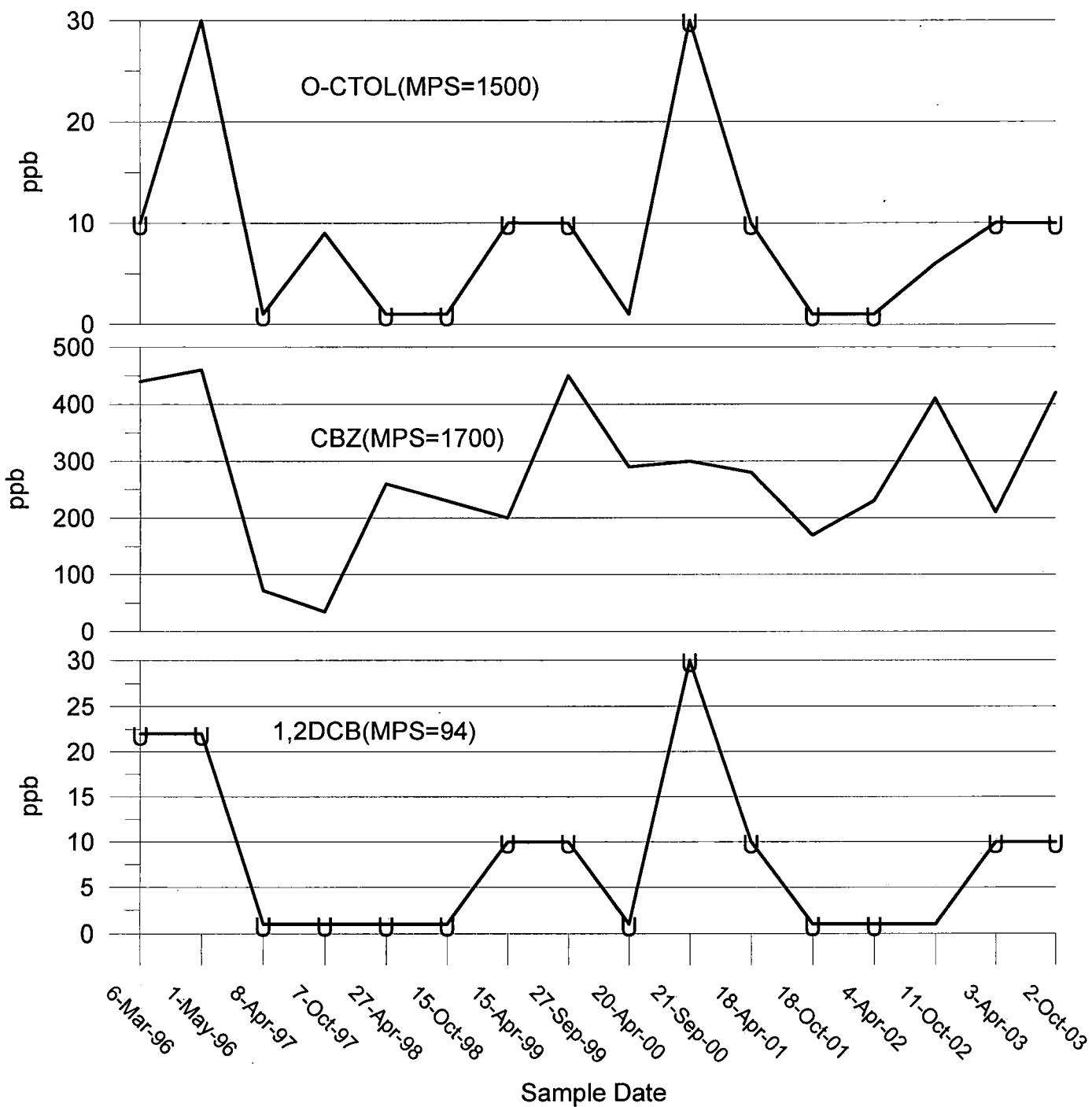
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"J"=Estimated Value
MPS=Media Protection Std.



Ciba Specialty Chemicals Corp
Cranston Rhode Island Facility
Time-Series Graph
Semiannual Monitoring

Well P-036S
Along Bulkhead

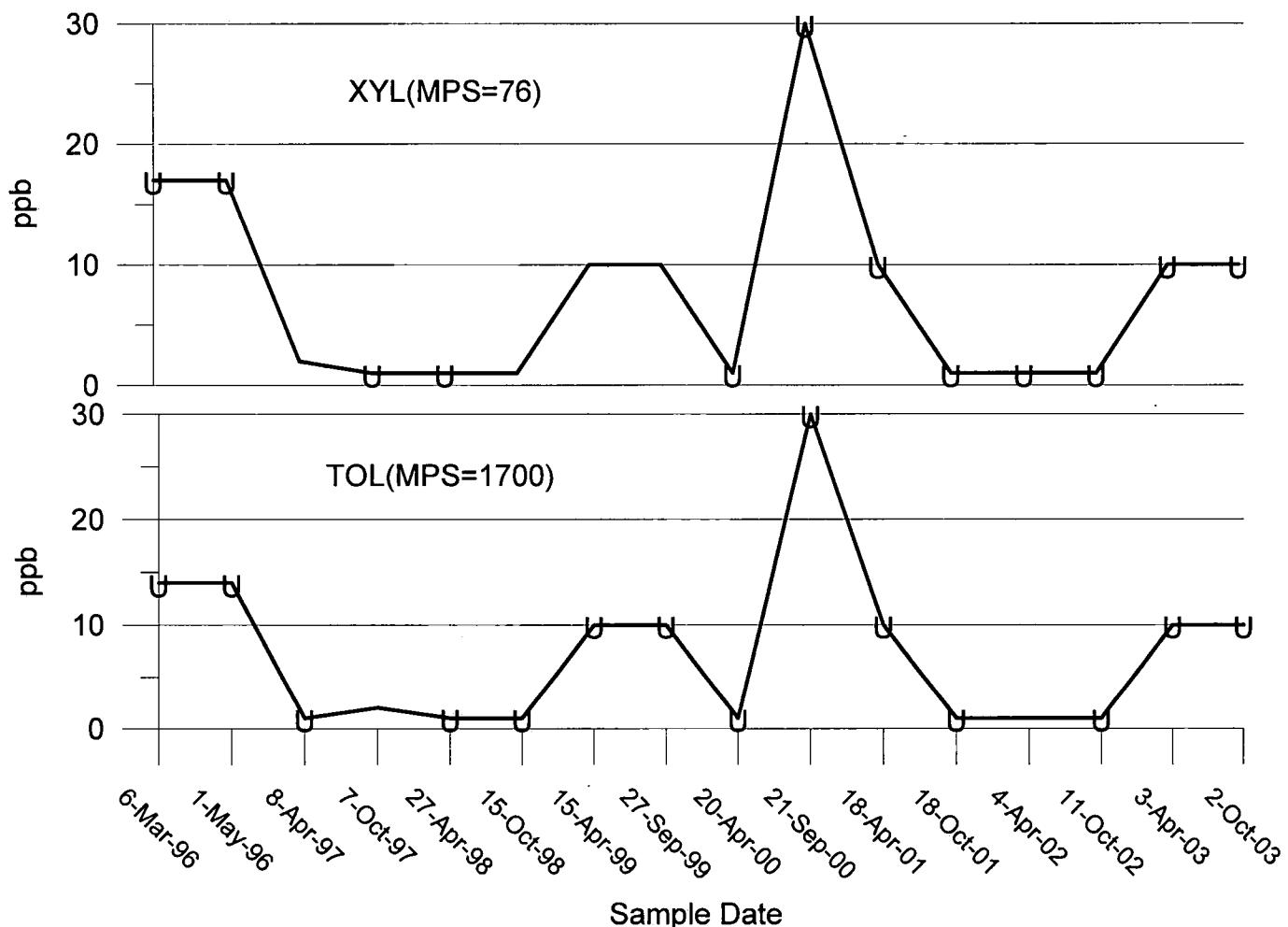
"U"=Nondetect
"J"=Estimated Value
MPS=Media Protection Std.



Ciba Specialty Chemicals Corp
Cranston Rhode Island Facility
Time-Series Graph
Semiannual Monitoring

Well P-036S
Along Bulkhead

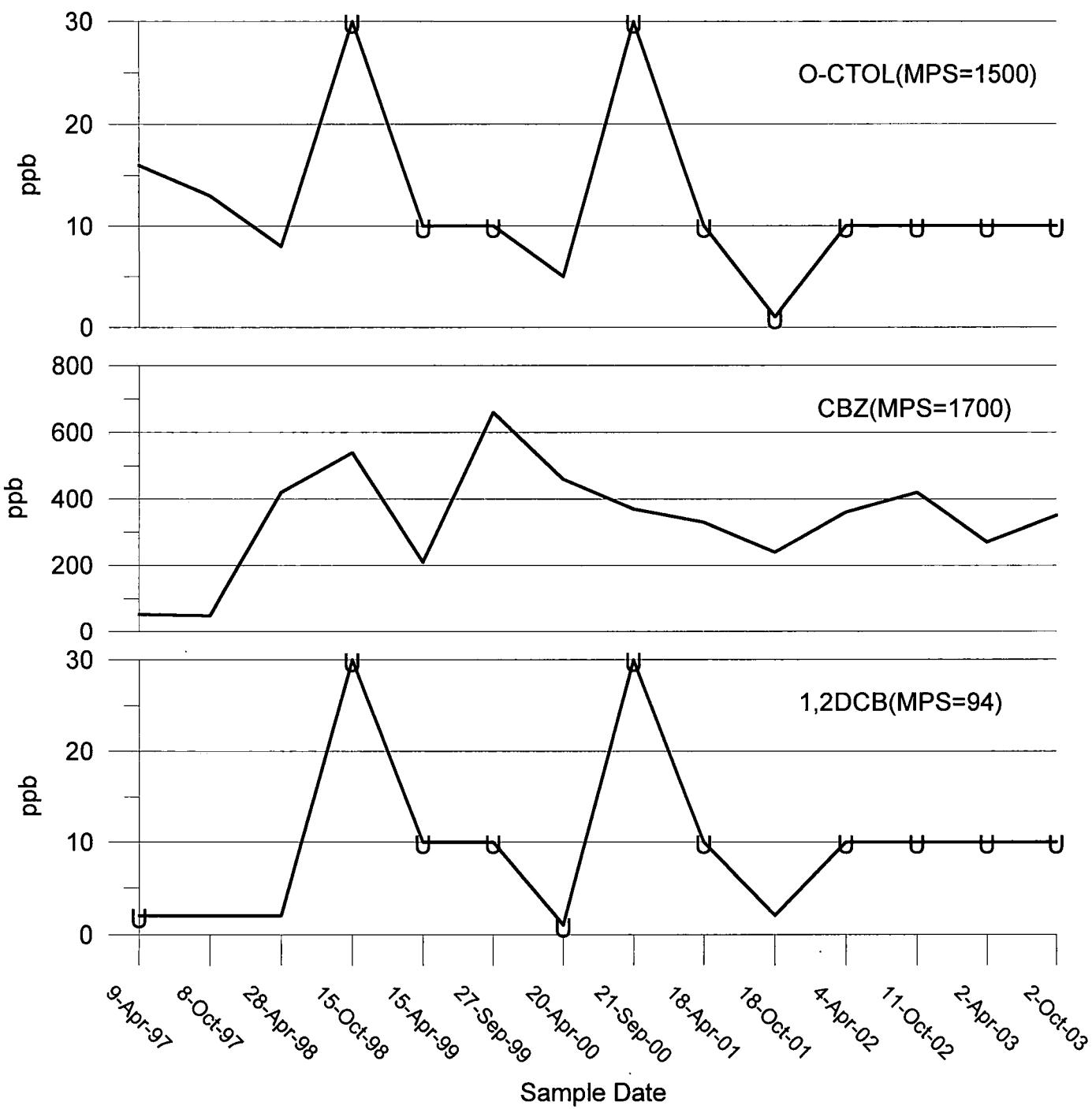
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"J"=Estimated Value
MPS=Media Protection Std.



Ciba Specialty Chemicals Corp
Cranston Rhode Island Facility
Time-Series Graph
Semiannual Monitoring

Well P-037S
Along Bulkhead

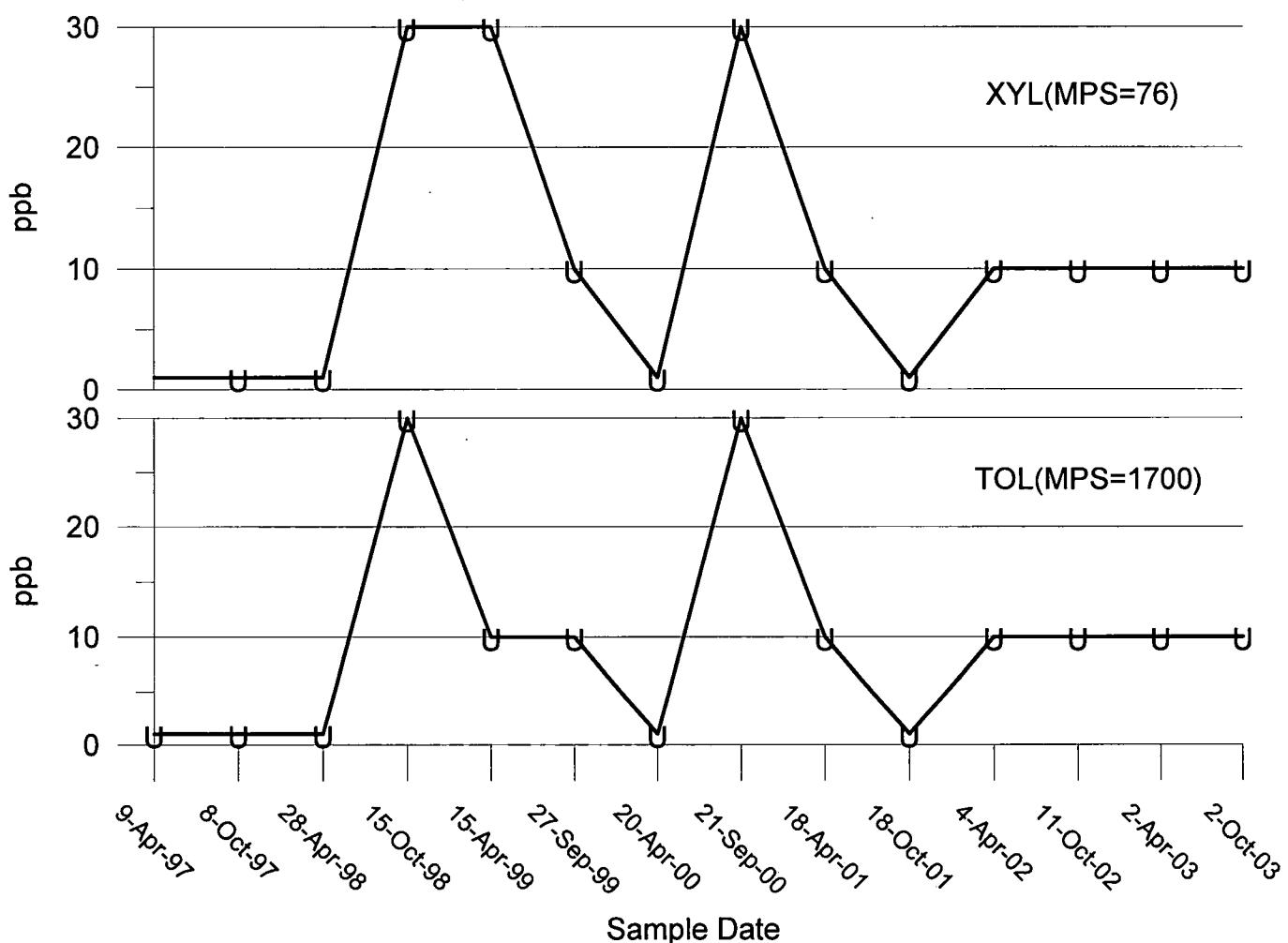
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"J"=Estimated Value
MPS=Media Protection Std.



Ciba Specialty Chemicals Corp
Cranston Rhode Island Facility
Time-Series Graph
Semiannual Monitoring

Well P-037S
Along Bulkhead

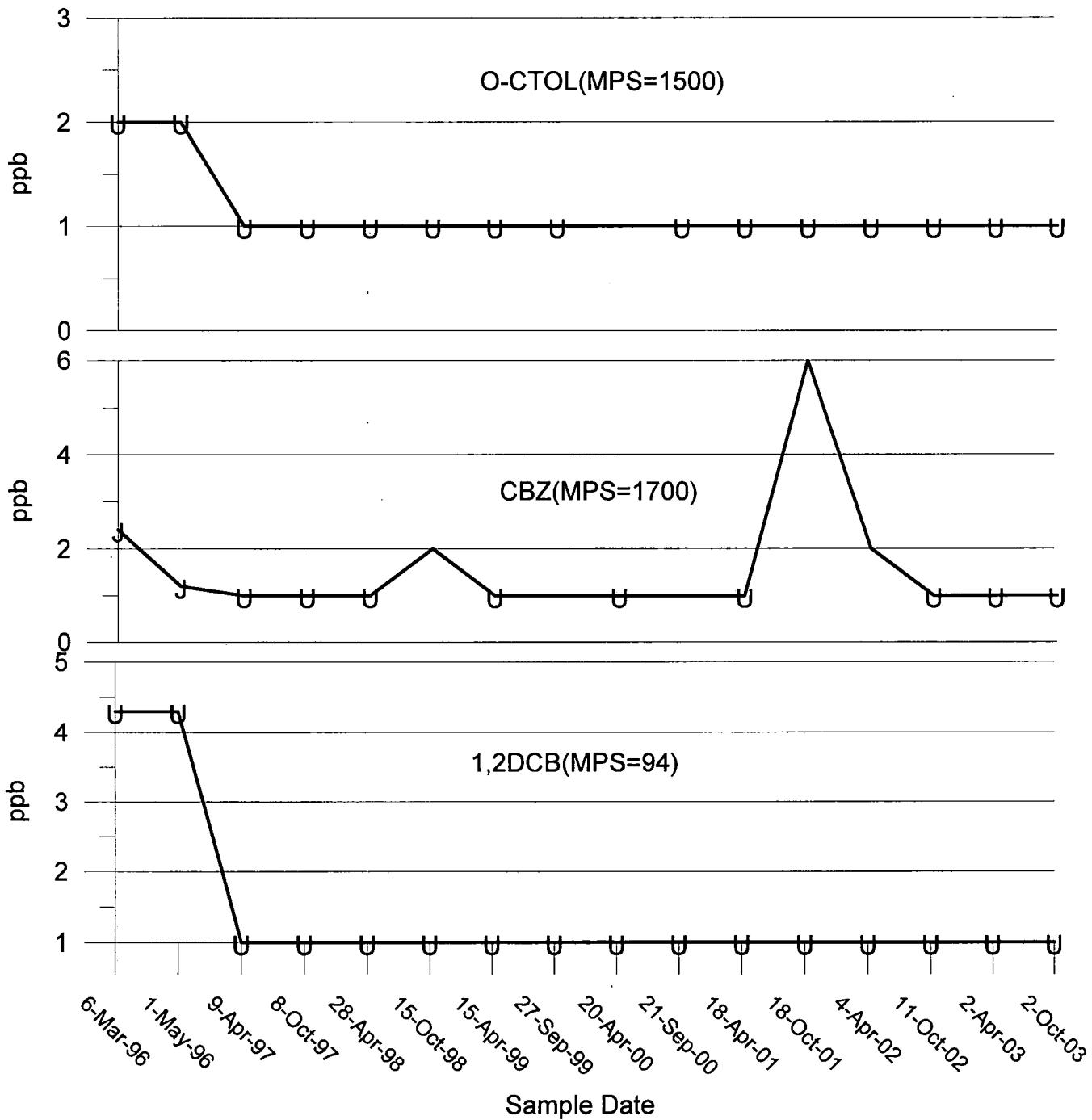
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"J"=Estimated Value
MPS=Media Protection Std.



Ciba Specialty Chemicals Corp
Cranston Rhode Island Facility
Time-Series Graph
Semiannual Monitoring

Well P-038S
Along Bulkhead

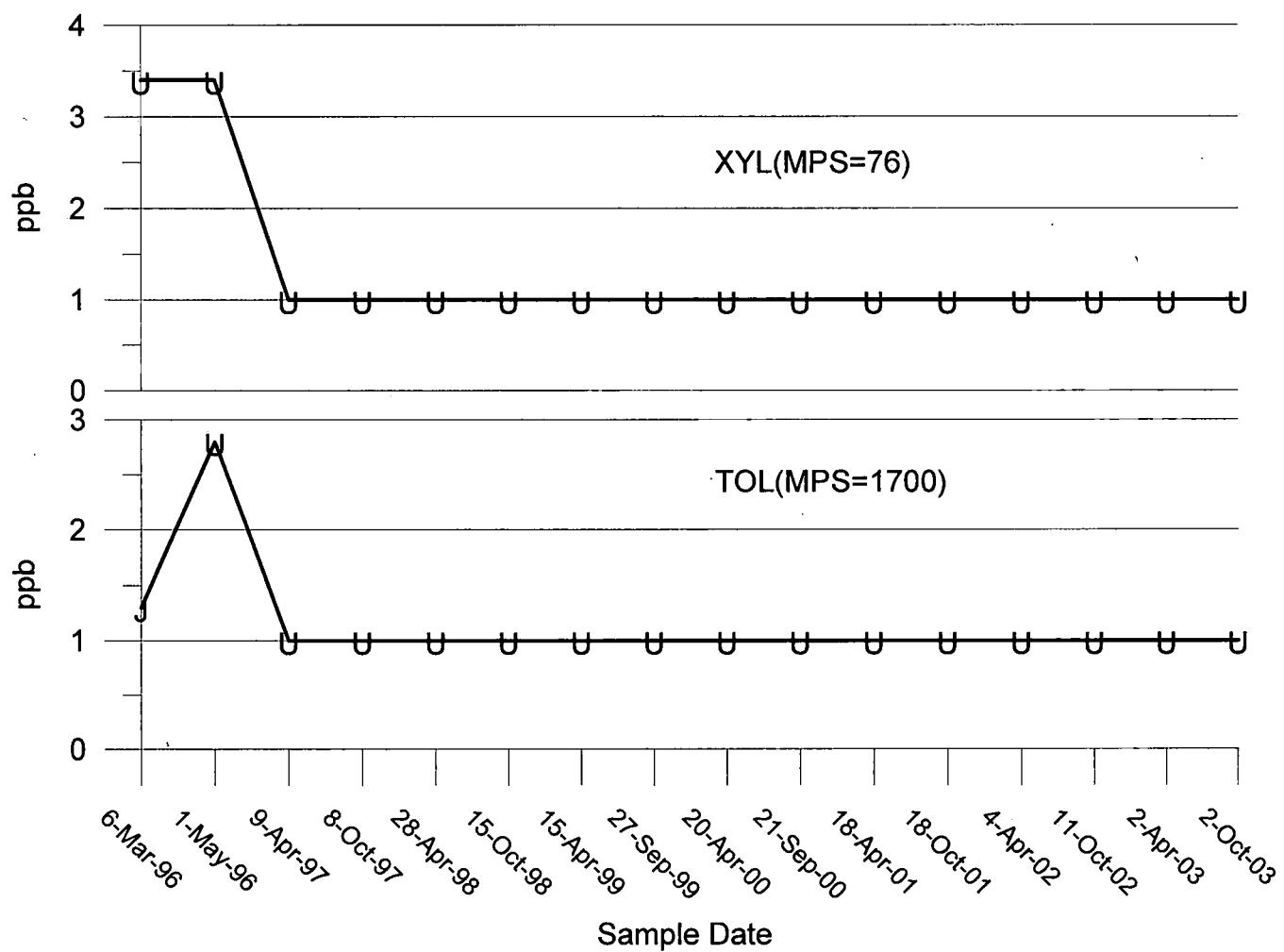
"U"=Nondetect
"J"=Estimated Value
MPS=Media Protection Std.



Ciba Specialty Chemicals Corp
Cranston Rhode Island Facility
Time-Series Graph
Semiannual Monitoring

Well P-038S
Along Bulkhead

"U"=Nondetect
"J"=Estimated Value
MPS=Media Protection Std.



APPENDIX D
TIME-SERIES GRAPHS
FOR
IN-RIVER WELLS

Table 5
IN-RIVER WELLS
Cumulative Results for Chemicals Of Concern
(Units in ppb)

Well No.	Date Sampled	1,2-Dichloro-benzene	Chloro-benzene	o-Chloro-toluene	Toluene	Xylenes
MPS		94	1700	1500	1700	76
SW-110	6-Mar-96	54	1600	55	460	34 U
SW-110	2-May-96	63 J	1600	40 U	220	68 U
SW-110	10-Apr-97	23	110	1	62	8
SW-110	8-Oct-97	1 U	1 U	1 U	1 U	1 U
SW-110	27-Apr-98	21	1100	2	170	6
SW-110	15-Oct-98	100 U	440	100 U	100 U	100 U
SW-110	15-Apr-99	50 U	670	50 U	50 U	50 U
SW-110	27-Sep-99	40 U	2500	40 U	220	40 U
SW-110	20-Apr-00	47	20 U	91	380	20 U
SW-110	21-Sep-00	100 U	2000	100 U	820	100 U
SW-110	18-Apr-01	1 U	3	1 U	1 U	1 U
SW-110	18-Oct-01	1 U	2	1 U	1 U	1 U
SW-110	4-Apr-02	1 U	2	1 U	1 U	1 U
SW-110	11-Oct-02	1 U	5	1 U	1 U	1 U
SW-110	2-Apr-03	1 U	1 U	1 U	1 U	1 U
SW-110	2-Oct-03	1 U	1	1 U	1 U	1 U
SW-120	5-Mar-96	4.3 U	63	2 U	2.8 U	3.4 U
SW-120	30-Apr-96	4.3 U	70	2 U	2.8 U	3.4 U
SW-120	8-Apr-97	1 U	43	1 U	1 U	1 U
SW-120	7-Oct-97	1	39	39	31	2
SW-120	27-Apr-98	1 U	54	1 U	1 U	1 U
SW-120	15-Oct-98	1 U	36	1 U	1 U	1 U
SW-120	15-Apr-99	10 U	92	10 U	10 U	10 U
SW-120	27-Sep-99	10 U	68	10 U	10 U	10 U
SW-120	20-Apr-00	1 U	67	1 U	1 U	1 U
SW-120	21-Sep-00	9100	1800	500 U	500 U	500 U
SW-120	18-Apr-01	1 U	58	1 U	1 U	1 U
SW-120	18-Oct-01	2	54	1 U	1 U	1 U
SW-120	5-Apr-02	1 U	39	1 U	1 U	1 U
SW-120	11-Oct-02	1 U	47	1 U	1 U	1 U
SW-120	2-Apr-03	1 U	45	1 U	1 U	1 U
SW-120	3-Oct-03	1 U	44	1 U	1 U	1 U
SW-130	6-Mar-96	4.3 U	3 U	6.5	2.8 U	3.4 U
SW-130	1-May-96	4.3 U	3 U	12	2.8 U	3.4 U
SW-130	9-Apr-97	1 U	1	12	1 U	1 U
SW-130	7-Oct-97	1 U	1 U	2	1 U	1 U
SW-130	27-Apr-98	1 U	27	14	1 U	1 U
SW-130	15-Oct-98	1 U	1 U	1	1 U	1 U
SW-130	15-Apr-99	1 U	5	5	1 U	1 U
SW-130	27-Sep-99	1 U	1	2	1 U	1 U
SW-130	20-Apr-00	1	10	30	1 U	1
SW-130	21-Sep-00	5 U	5 U	5 U	5 U	5 U
SW-130	19-Apr-01	1 U	1 U	1 U	1 U	1 U
SW-130	18-Oct-01	1 U	12	1 U	1 U	1 U
SW-130	4-Apr-02	1 U	1 U	1 U	1 U	1 U
SW-130	11-Oct-02	1 U	1 U	1 U	1 U	1 U
SW-130	2-Apr-03	NA	NA	NA	NA	NA
SW-130	3-Oct-03	NA	NA	NA	NA	NA

MPS = Media Protection Standard

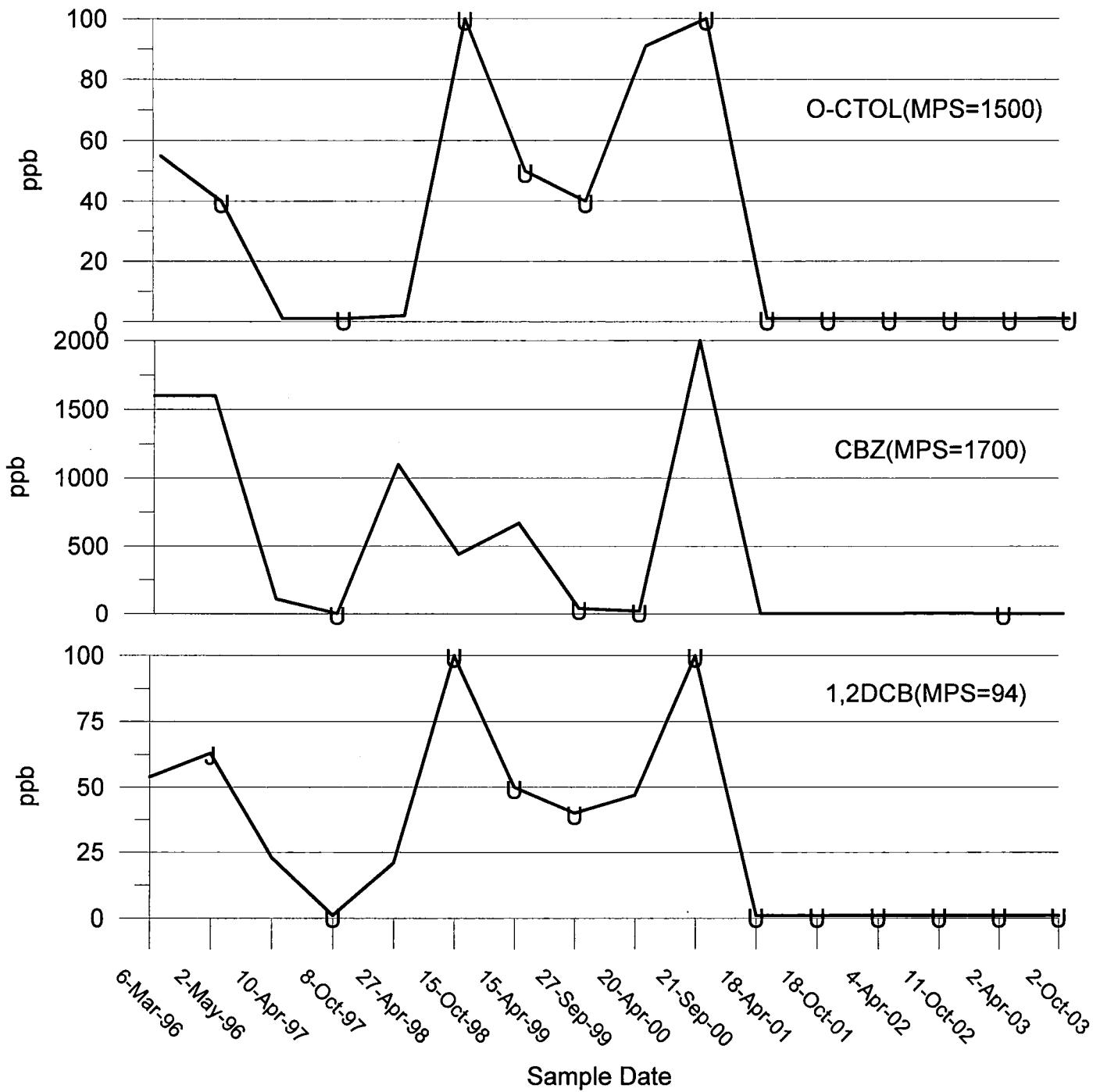
U = Nondetect with detection limit given

J = Estimated value

Ciba Specialty Chemicals Corp
Cranston Rhode Island Facility
Time-Series Graph
Semiannual Monitoring

Well SW-110
In-River Wells

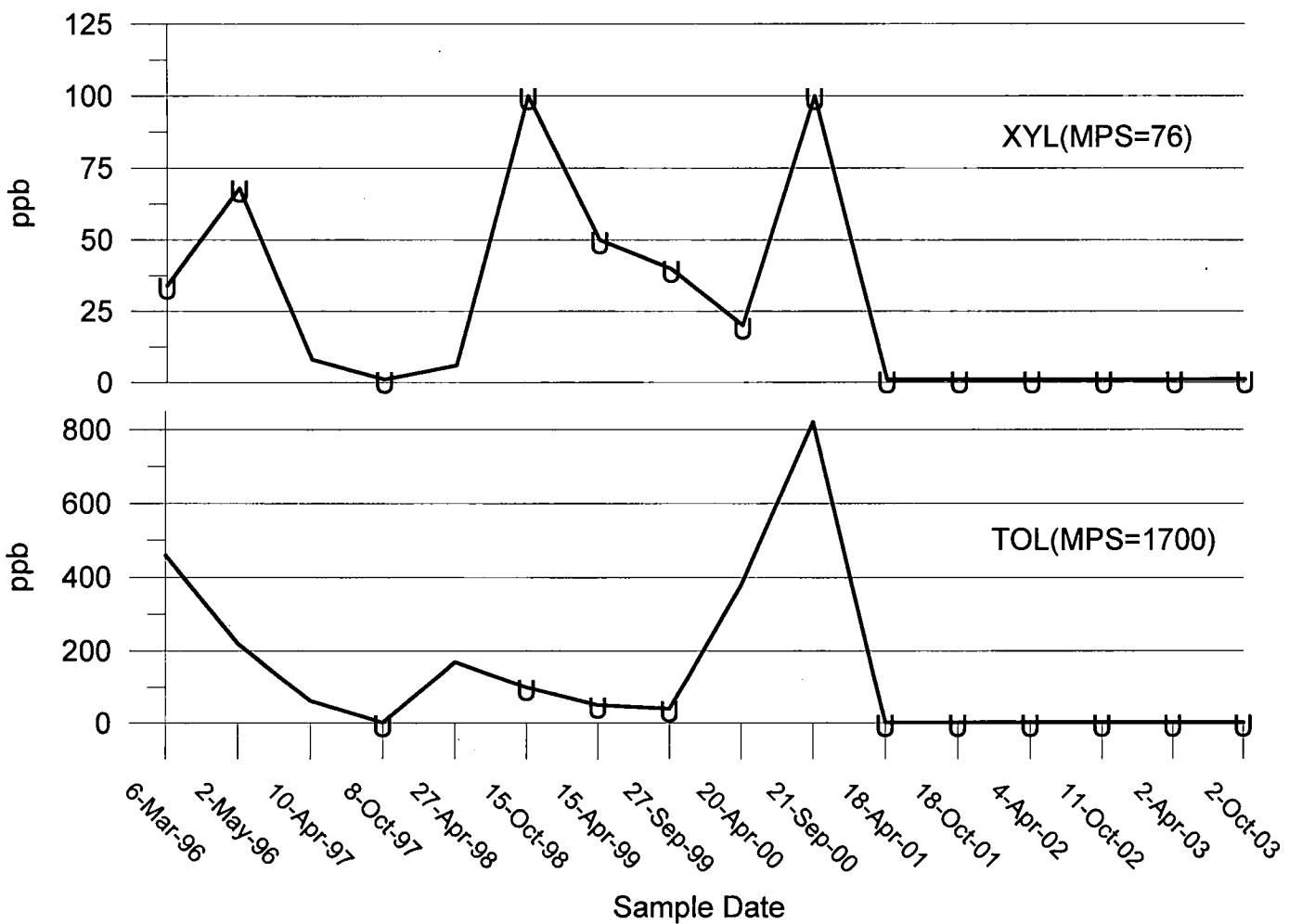
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"J"=Estimated Value
MPS=Media Protection Std.



Ciba Specialty Chemicals Corp
Cranston Rhode Island Facility
Time-Series Graph
Semiannual Monitoring

Well SW-110
In-River Well

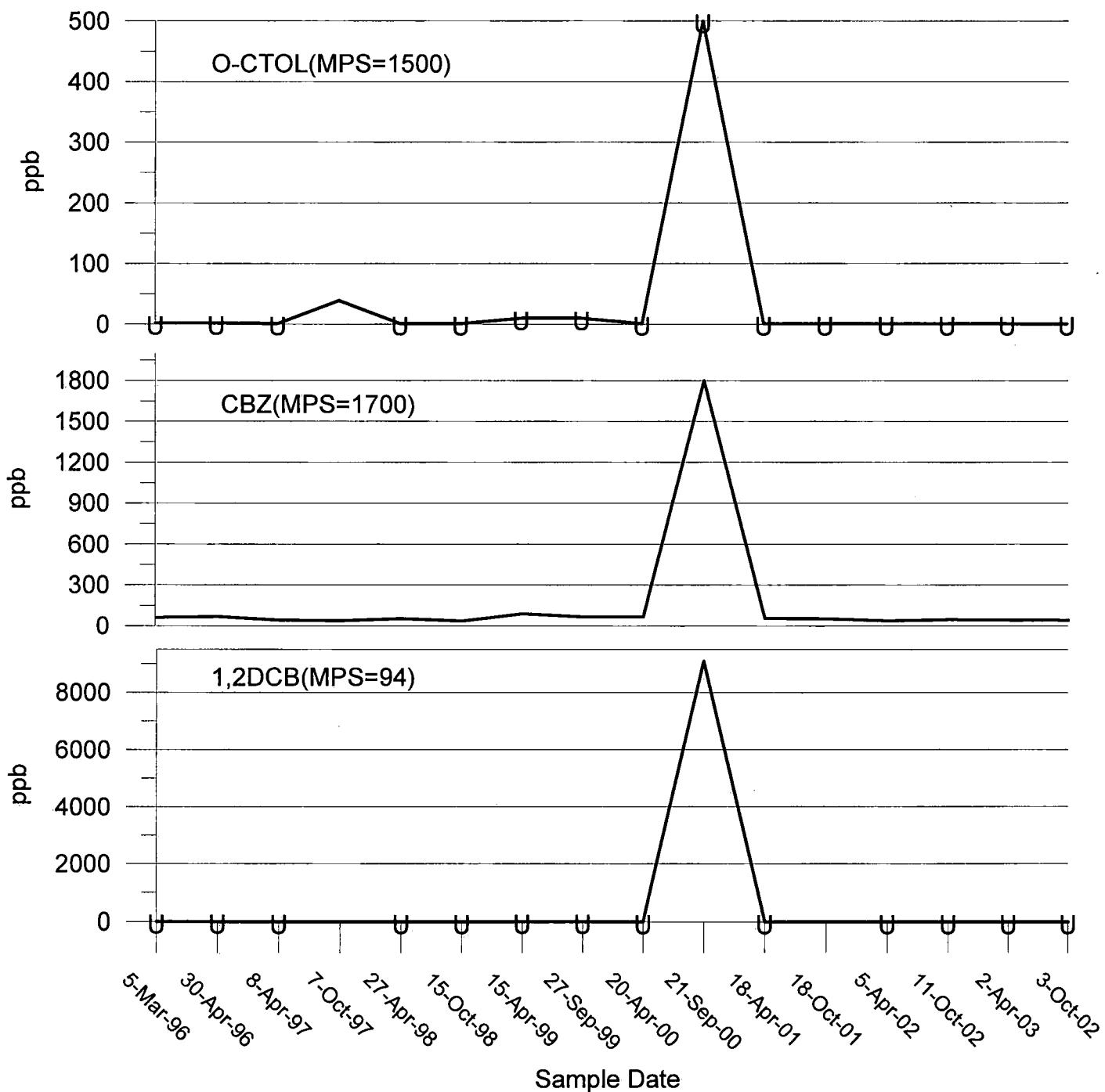
"U"=Nondetect
"J"=Estimated Value
MPS=Media Protection Std.



Ciba Specialty Chemicals Corp
Cranston Rhode Island Facility
Time-Series Graph
Semiannual Monitoring

Well SW-120
In-River Well

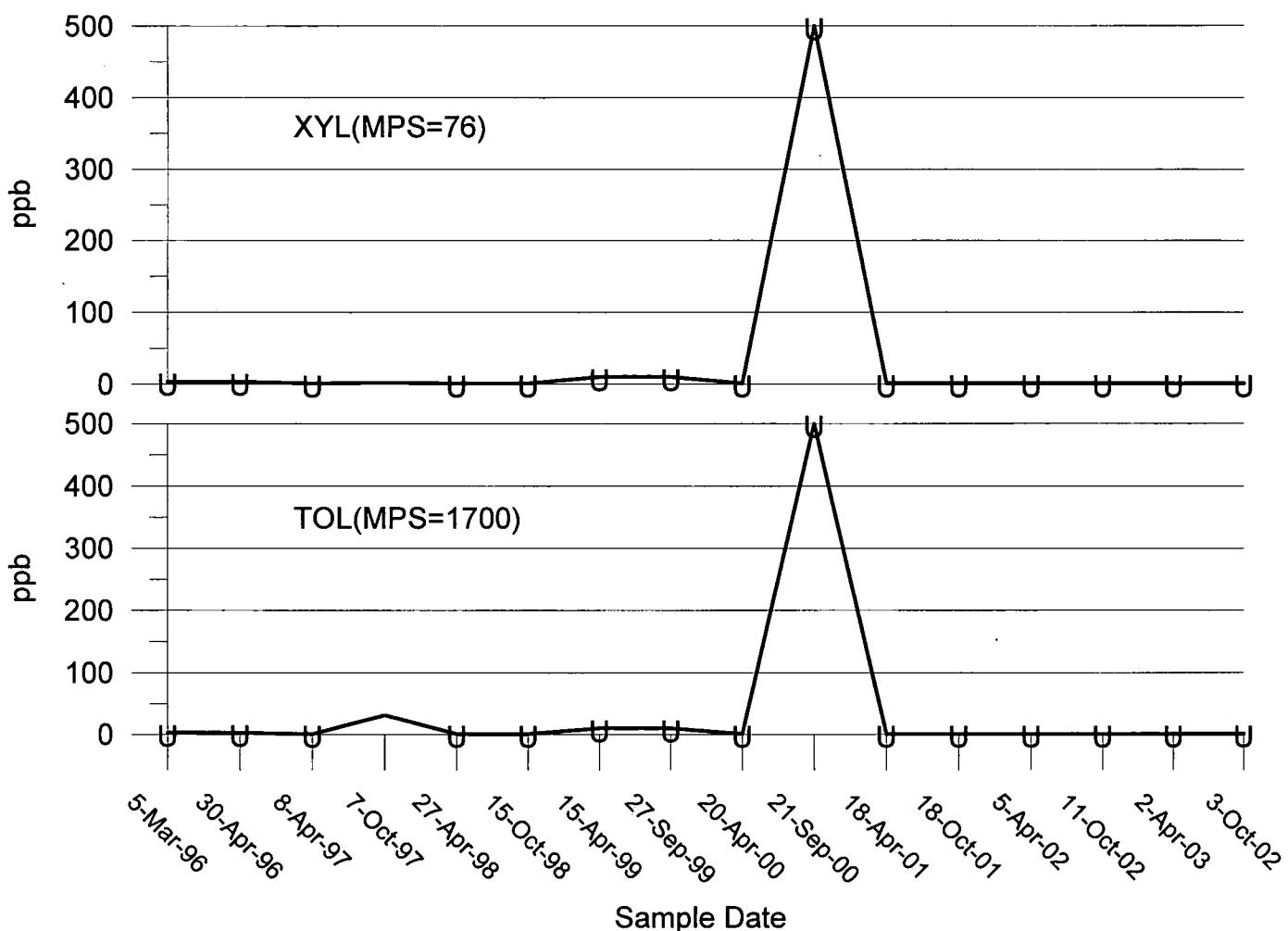
"U"=Nondetect
"J"=Estimated Value
MPS=Media Protection Std.



Ciba Specialty Chemicals Corp
Cranston Rhode Island Facility
Time-Series Graph
Semiannual Monitoring

Well SW-120
In-River Well

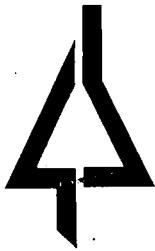
"U"=Nondetect
"J"=Estimated Value
MPS=Media Protection Std.



APPENDIX E

CERTIFICATE OF ANALYSIS

R. I. ANALYTICAL



R.I. Analytical

Specialists in Environmental Services

1 of 37

CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.
Attn: Mr. Barry Cohen
180 Mill Street
Cranston, RI 02905

Date Received: 10/03/2003
Date Reported: 10/20/2003
P.O. #: T0092805
Work Order #: 0310-14312

DESCRIPTION CIBA GEIGY, MILL STREET MW'S (SAMPLED BY RIAL PERSONNEL)

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies and all NELAC requirements were met. The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015
NH-253700 A & B, USDA S-41844, NY-11726

If you have any questions regarding this work, or if we may be of further assistance, please contact us.

Approved by:

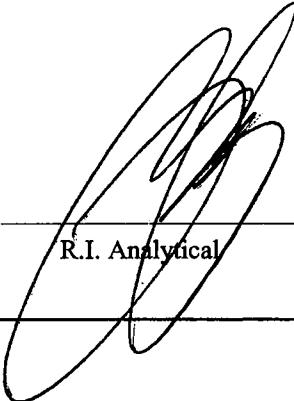
Paul Perrotti
Data Reporting Manager

enc: Chain of Custody

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Approved by:


R.I. Analytical

Ciba Specialty Chemicals Corp.

Date Received: 10/03/2003

Work Order #: 0310-14312

Sample #: 001

SAMPLE SW-110

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 10/02/2003 @ 10:25

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.7		SU	EPA 150.1	10/02/2003	RMB
TEMPERATURE (field)	62		F	EPA 170.1	10/02/2003	RMB
SPECIFIC CONDUCTANCE (field)	390	1	µMHOS/CM	EPA 120.1	10/02/2003	RMB
DISSOLVED OXYGEN (Field)	4.4	1.0	mg/l	EPA 360.1	10/02/2003	RMB
Volatile Organic Compounds						
chloromethane	<10	10	ug/l	8260	10/10/2003	BAS
Bromomethane	<10	10	ug/l	8260	10/10/2003	BAS
vinyl chloride	3	1	ug/l	8260	10/10/2003	BAS
dichlorodifluoromethane	<10	10	ug/l	8260	10/10/2003	BAS
chloroethane	<10	10	ug/l	8260	10/10/2003	BAS
methylene chloride	<5	5	ug/l	8260	10/10/2003	BAS
trichlorofluoromethane	<1	1	ug/l	8260	10/10/2003	BAS
1,1-dichloroethylene	<1	1	ug/l	8260	10/10/2003	BAS
1,1-dichloroethane	<1	1	ug/l	8260	10/10/2003	BAS
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	10/10/2003	BAS
chloroform	<1	1	ug/l	8260	10/10/2003	BAS
1,2-dichloroethane	<1	1	ug/l	8260	10/10/2003	BAS
1,1,1-Trichloroethane	<1	1	ug/l	8260	10/10/2003	BAS
carbon tetrachloride	<1	1	ug/l	8260	10/10/2003	BAS
Bromodichloromethane	<1	1	ug/l	8260	10/10/2003	BAS
1,2-dichloropropane	<1	1	ug/l	8260	10/10/2003	BAS
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	10/10/2003	BAS
Trichloroethylene	<1	1	ug/l	8260	10/10/2003	BAS
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	10/10/2003	BAS
1,1,2-Trichloroethane	<1	1	ug/l	8260	10/10/2003	BAS
Dibromochloromethane	<1	1	ug/l	8260	10/10/2003	BAS
Bromoform	<1	1	ug/l	8260	10/10/2003	BAS
Tetrachloroethylene	<1	1	ug/l	8260	10/10/2003	BAS
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	10/10/2003	BAS
Chlorobenzene	1	1	ug/l	8260	10/10/2003	BAS
2-chloroethyl vinyl ether	<2	2	ug/l	8260	10/10/2003	BAS
Benzene	<1	1	ug/l	8260	10/10/2003	BAS
toluene	<1	1	ug/l	8260	10/10/2003	BAS
ethylbenzene	<1	1	ug/l	8260	10/10/2003	BAS
xylenes(Total)	<1	1	ug/l	8260	10/10/2003	BAS
acetone	<10	10	ug/l	8260	10/10/2003	BAS
Carbon disulfide	<5	5	ug/l	8260	10/10/2003	BAS
2-butanone(MEK)	<10	10	ug/l	8260	10/10/2003	BAS
vinyl acetate	<50	50	ug/l	8260	10/10/2003	BAS
4-methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	10/10/2003	BAS
2-hexanone	<50	50	ug/l	8260	10/10/2003	BAS
Styrene	<1	1	ug/l	8260	10/10/2003	BAS
o-chlorotoluene	<1	1	ug/l	8260	10/10/2003	BAS

R.I. Analytical Laboratories, Inc.**CERTIFICATE OF ANALYSIS**

Ciba Specialty Chemicals Corp.

Date Received: 10/03/2003

Work Order #: 0310-14312

Approved by:

R.I. Analytical

Sample #: 001

SAMPLE SW-110**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 10/02/2003 @ 10:25

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,2-Dichlorobenzene	<1	1	ug/l	8260	10/10/2003	BAS
1,3-Dichlorobenzene	<1	1	ug/l	8260	10/10/2003	BAS
1,4-Dichlorobenzene	<1	1	ug/l	8260	10/10/2003	BAS
Surrogates			RANGE	8260	10/10/2003	BAS
Dibromofluoromethane	104		86-118%	8260	10/10/2003	BAS
4-Bromofluorobenzene	92		86-115%	8260	10/10/2003	BAS
Toluene-D8	99		88-110%	8260	10/10/2003	BAS

R.I. Analytical Laboratories, Inc.**CERTIFICATE OF ANALYSIS**

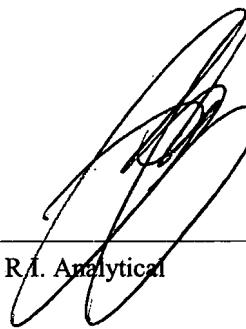
Ciba Specialty Chemicals Corp.

Date Received: 10/03/2003

Work Order #: 0310-14312

Approved by:

R.I. Analytical



Sample #: 002

SAMPLE P-37S**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 10/02/2003 @ 10:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	7.2		SU	EPA 150.1	10/02/2003	RMB
TEMPERATURE (field)	66		F	EPA 170.1	10/02/2003	RMB
SPECIFIC CONDUCTANCE (field)	590	1	uMHOS/CM	EPA 120.1	10/02/2003	RMB
DISSOLVED OXYGEN (Field)	2.1	1.0	mg/l	EPA 360.1	10/02/2003	RMB
Volatile Organic Compounds						
chloromethane	<100	100	ug/l	8260	10/10/2003	BAS
Bromomethane	<100	100	ug/l	8260	10/10/2003	BAS
vinyl chloride	<10	10	ug/l	8260	10/10/2003	BAS
dichlorodifluoromethane	<100	100	ug/l	8260	10/10/2003	BAS
chloroethane	<100	100	ug/l	8260	10/10/2003	BAS
methylene chloride	<50	50	ug/l	8260	10/10/2003	BAS
trichlorofluoromethane	<10	10	ug/l	8260	10/10/2003	BAS
1,1-dichloroethylene	<10	10	ug/l	8260	10/10/2003	BAS
1,1-dichloroethane	<10	10	ug/l	8260	10/10/2003	BAS
trans-1,2-Dichloroethylene	<10	10	ug/l	8260	10/10/2003	BAS
chloroform	<10	10	ug/l	8260	10/10/2003	BAS
1,2-dichloroethane	<10	10	ug/l	8260	10/10/2003	BAS
1,1,1-Trichloroethane	<10	10	ug/l	8260	10/10/2003	BAS
carbon tetrachloride	<10	10	ug/l	8260	10/10/2003	BAS
Bromodichloromethane	<10	10	ug/l	8260	10/10/2003	BAS
1,2-dichloropropane	<10	10	ug/l	8260	10/10/2003	BAS
cis-1,3-Dichloropropylene	<10	10	ug/l	8260	10/10/2003	BAS
Trichloroethylene	<10	10	ug/l	8260	10/10/2003	BAS
trans-1,3-Dichloropropylene	<10	10	ug/l	8260	10/10/2003	BAS
1,1,2-Trichloroethane	<10	10	ug/l	8260	10/10/2003	BAS
Dibromochloromethane	<10	10	ug/l	8260	10/10/2003	BAS
Bromoform	<10	10	ug/l	8260	10/10/2003	BAS
Tetrachloroethylene	<10	10	ug/l	8260	10/10/2003	BAS
1,1,2,2-Tetrachloroethane	<10	10	ug/l	8260	10/10/2003	BAS
Chlorobenzene	350	10	ug/l	8260	10/10/2003	BAS
2-chloroethyl vinyl ether	<20	20	ug/l	8260	10/10/2003	BAS
Benzene	<10	10	ug/l	8260	10/10/2003	BAS
toluene	<10	10	ug/l	8260	10/10/2003	BAS
ethylbenzene	<10	10	ug/l	8260	10/10/2003	BAS
xlenes(Total)	<10	10	ug/l	8260	10/10/2003	BAS
acetone	<100	100	ug/l	8260	10/10/2003	BAS
Carbon disulfide	<50	50	ug/l	8260	10/10/2003	BAS
2-butanone(MEK)	<100	100	ug/l	8260	10/10/2003	BAS
vinyl acetate	<500	500	ug/l	8260	10/10/2003	BAS
4-methyl-2-pentanone(MIBK)	<500	500	ug/l	8260	10/10/2003	BAS
2-hexanone	<500	500	ug/l	8260	10/10/2003	BAS
Styrene	<10	10	ug/l	8260	10/10/2003	BAS
o-chlorotoluene	<10	10	ug/l	8260	10/10/2003	BAS

R.I. Analytical Laboratories, Inc.**CERTIFICATE OF ANALYSIS**

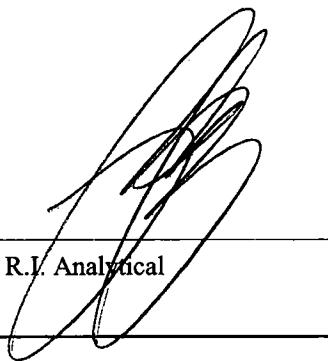
Ciba Specialty Chemicals Corp.

Date Received: 10/03/2003

Work Order #: 0310-14312

Approved by:

R.I. Analytical



Sample #: 002

SAMPLE P-37S**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 10/02/2003 @ 10:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,2-Dichlorobenzene	<10	10	ug/l	8260	10/10/2003	BAS
1,3-Dichlorobenzene	<10	10	ug/l	8260	10/10/2003	BAS
1,4-Dichlorobenzene	<10	10	ug/l	8260	10/10/2003	BAS
Surrogates			RANGE	8260	10/10/2003	BAS
Dibromofluoromethane	104		86-118%	8260	10/10/2003	BAS
4-Bromofluorobenzene	93		86-115%	8260	10/10/2003	BAS
Toluene-D8	101		88-110%	8260	10/10/2003	BAS

Method 8260: Detection limits increased as a result of sample dilution. Sample dilution required to achieve target compound response within the calibration range of the analysis.

R.I. Analytical Laboratories, Inc.

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Ciba Specialty Chemicals Corp.

Date Received: 10/03/2003

Work Order #: 0310-14312

Approved by:

R.I. Analytical

Sample #: 003

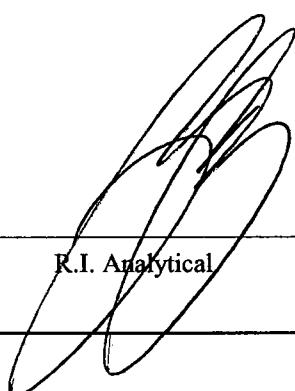
SAMPLE P-38S**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 10/02/2003 @ 11:20

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.6		SU	EPA 150.1	10/02/2003	RMB
TEMPERATURE (field)	63		F	EPA 170.1	10/02/2003	RMB
SPECIFIC CONDUCTANCE (field)	390	1	uMHOS/CM	EPA 120.1	10/02/2003	RMB
DISSOLVED OXYGEN (Field)	4.3	1.0	mg/l	EPA 360.1	10/02/2003	RMB
Volatile Organic Compounds						
chloromethane	<10	10	ug/l	8260	10/10/2003	BAS
Bromomethane	<10	10	ug/l	8260	10/10/2003	BAS
vinyl chloride	<1	1	ug/l	8260	10/10/2003	BAS
dichlorodifluoromethane	<10	10	ug/l	8260	10/10/2003	BAS
chloroethane	<10	10	ug/l	8260	10/10/2003	BAS
methylene chloride	<5	5	ug/l	8260	10/10/2003	BAS
trichlorofluoromethane	<1	1	ug/l	8260	10/10/2003	BAS
1,1-dichloroethylene	<1	1	ug/l	8260	10/10/2003	BAS
1,1-dichloroethane	<1	1	ug/l	8260	10/10/2003	BAS
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	10/10/2003	BAS
chloroform	<1	1	ug/l	8260	10/10/2003	BAS
1,2-dichloroethane	<1	1	ug/l	8260	10/10/2003	BAS
1,1,1-Trichloroethane	<1	1	ug/l	8260	10/10/2003	BAS
carbon tetrachloride	<1	1	ug/l	8260	10/10/2003	BAS
Bromodichloromethane	<1	1	ug/l	8260	10/10/2003	BAS
1,2-dichloropropane	<1	1	ug/l	8260	10/10/2003	BAS
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	10/10/2003	BAS
Trichloroethylene	<1	1	ug/l	8260	10/10/2003	BAS
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	10/10/2003	BAS
1,1,2-Trichloroethane	<1	1	ug/l	8260	10/10/2003	BAS
Dibromochloromethane	<1	1	ug/l	8260	10/10/2003	BAS
Bromoform	<1	1	ug/l	8260	10/10/2003	BAS
Tetrachloroethylene	<1	1	ug/l	8260	10/10/2003	BAS
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	10/10/2003	BAS
Chlorobenzene	<1	1	ug/l	8260	10/10/2003	BAS
2-chloroethyl vinyl ether	<2	2	ug/l	8260	10/10/2003	BAS
Benzene	<1	1	ug/l	8260	10/10/2003	BAS
toluene	<1	1	ug/l	8260	10/10/2003	BAS
ethylbenzene	<1	1	ug/l	8260	10/10/2003	BAS
xylenes(Total)	<1	1	ug/l	8260	10/10/2003	BAS
acetone	<10	10	ug/l	8260	10/10/2003	BAS
Carbon disulfide	<5	5	ug/l	8260	10/10/2003	BAS
2-butanone(MEK)	<10	10	ug/l	8260	10/10/2003	BAS
vinyl acetate	<50	50	ug/l	8260	10/10/2003	BAS
4-methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	10/10/2003	BAS
2-hexanone	<50	50	ug/l	8260	10/10/2003	BAS
Styrene	<1	1	ug/l	8260	10/10/2003	BAS
o-chlorotoluene	<1	1	ug/l	8260	10/10/2003	BAS

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Approved by:

R.I. Analytical



Ciba Specialty Chemicals Corp.

Date Received: 10/03/2003

Work Order #: 0310-14312

Sample #: 003

SAMPLE P-38S**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 10/02/2003 @ 11:20

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,2-Dichlorobenzene	<1	1	ug/l	8260	10/10/2003	BAS
1,3-Dichlorobenzene	<1	1	ug/l	8260	10/10/2003	BAS
1,4-Dichlorobenzene	<1	1	ug/l	8260	10/10/2003	BAS
Surrogates			RANGE	8260	10/10/2003	BAS
Dibromofluoromethane	104		86-118%	8260	10/10/2003	BAS
4-Bromofluorobenzene	93		86-115%	8260	10/10/2003	BAS
Toluene-D8	100		88-110%	8260	10/10/2003	BAS

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 10/03/2003

Work Order #: 0310-14312

Approved by:

R.I. Analytical

Sample #: 004

SAMPLE PW-110 PUMP HOUSE
SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 10/02/2003 @ 11:40

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.6		SU	EPA 150.1	10/02/2003	RMB
TEMPERATURE (field)	63		F	EPA 170.1	10/02/2003	RMB
SPECIFIC CONDUCTANCE (field)	370	1	uMHOS/CM	EPA 120.1	10/02/2003	RMB
DISSOLVED OXYGEN (Field)	<1.0	1.0	mg/l	EPA 360.1	10/02/2003	RMB
Volatile Organic Compounds						
chloromethane	<10	10	ug/l	8260	10/10/2003	BAS
Bromomethane	<10	10	ug/l	8260	10/10/2003	BAS
vinyl chloride	<1	1	ug/l	8260	10/10/2003	BAS
dichlorodifluoromethane	<10	10	ug/l	8260	10/10/2003	BAS
chloroethane	<10	10	ug/l	8260	10/10/2003	BAS
methylene chloride	<5	5	ug/l	8260	10/10/2003	BAS
trichlorofluoromethane	<1	1	ug/l	8260	10/10/2003	BAS
1,1-dichloroethylene	<1	1	ug/l	8260	10/10/2003	BAS
1,1-dichloroethane	<1	1	ug/l	8260	10/10/2003	BAS
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	10/10/2003	BAS
chloroform	<1	1	ug/l	8260	10/10/2003	BAS
1,2-dichloroethane	<1	1	ug/l	8260	10/10/2003	BAS
1,1,1-Trichloroethane	<1	1	ug/l	8260	10/10/2003	BAS
carbon tetrachloride	<1	1	ug/l	8260	10/10/2003	BAS
Bromodichloromethane	<1	1	ug/l	8260	10/10/2003	BAS
1,2-dichloropropane	<1	1	ug/l	8260	10/10/2003	BAS
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	10/10/2003	BAS
Trichloroethylene	<1	1	ug/l	8260	10/10/2003	BAS
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	10/10/2003	BAS
1,1,2-Trichloroethane	<1	1	ug/l	8260	10/10/2003	BAS
Dibromochloromethane	<1	1	ug/l	8260	10/10/2003	BAS
Bromoform	<1	1	ug/l	8260	10/10/2003	BAS
Tetrachloroethylene	<1	1	ug/l	8260	10/10/2003	BAS
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	10/10/2003	BAS
Chlorobenzene	23	1	ug/l	8260	10/10/2003	BAS
2-chloroethyl vinyl ether	<2	2	ug/l	8260	10/10/2003	BAS
Benzene	<1	1	ug/l	8260	10/10/2003	BAS
toluene	<1	1	ug/l	8260	10/10/2003	BAS
ethylbenzene	<1	1	ug/l	8260	10/10/2003	BAS
xylenes(Total)	<1	1	ug/l	8260	10/10/2003	BAS
acetone	<10	10	ug/l	8260	10/10/2003	BAS
Carbon disulfide	<5	5	ug/l	8260	10/10/2003	BAS
2-butanoine(MEK)	<10	10	ug/l	8260	10/10/2003	BAS
vinyl acetate	<50	50	ug/l	8260	10/10/2003	BAS
4-methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	10/10/2003	BAS
2-hexanone	<50	50	ug/l	8260	10/10/2003	BAS
Styrene	<1	1	ug/l	8260	10/10/2003	BAS
o-chlorotoluene	23	1	ug/l	8260	10/10/2003	BAS

R.I. Analytical Laboratories, Inc.**CERTIFICATE OF ANALYSIS**

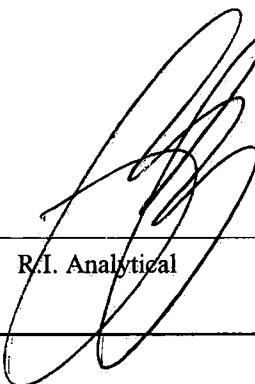
Ciba Specialty Chemicals Corp.

Date Received: 10/03/2003

Work Order #: 0310-14312

Approved by:

R.I. Analytical



Sample #: 004

SAMPLE PW-110 PUMP HOUSE**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 10/02/2003 @ 11:40

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE	ANALYZED	ANALYST
1,2-Dichlorobenzene	<1	1	ug/l	8260	10/10/2003	BAS	
1,3-Dichlorobenzene	<1	1	ug/l	8260	10/10/2003	BAS	
1,4-Dichlorobenzene	<1	1	ug/l	8260	10/10/2003	BAS	
Surrogates			RANGE	8260	10/10/2003	BAS	
Dibromofluoromethane	104		86-118%	8260	10/10/2003	BAS	
4-Bromofluorobenzene	94		86-115%	8260	10/10/2003	BAS	
Toluene-D8	99		88-110%	8260	10/10/2003	BAS	

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 10/03/2003

Work Order #: 0310-14312

Approved by:

R.I. Analytical

Sample #: 005

SAMPLE P-36S**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 10/02/2003 @ 12:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	7.2		su	EPA 150.1	10/02/2003	RMB
TEMPERATURE (field)	78		F	EPA 170.1	10/02/2003	RMB
SPECIFIC CONDUCTANCE (field)	780	1	uMHOS/CM	EPA 120.1	10/02/2003	RMB
DISSOLVED OXYGEN (Field)	2.4	1.0	mg/l	EPA 360.1	10/02/2003	RMB
Volatile Organic Compounds						
chloromethane	<100	100	ug/l	8260	10/10/2003	BAS
Bromomethane	<100	100	ug/l	8260	10/10/2003	BAS
vinyl chloride	<10	10	ug/l	8260	10/10/2003	BAS
dichlorodifluoromethane	<100	100	ug/l	8260	10/10/2003	BAS
chloroethane	<100	100	ug/l	8260	10/10/2003	BAS
methylene chloride	<50	50	ug/l	8260	10/10/2003	BAS
trichlorofluoromethane	<10	10	ug/l	8260	10/10/2003	BAS
1,1-dichloroethylene	<10	10	ug/l	8260	10/10/2003	BAS
1,1-dichloroethane	<10	10	ug/l	8260	10/10/2003	BAS
trans-1,2-Dichloroethylene	<10	10	ug/l	8260	10/10/2003	BAS
chloroform	<10	10	ug/l	8260	10/10/2003	BAS
1,2-dichloroethane	<10	10	ug/l	8260	10/10/2003	BAS
1,1,1-Trichloroethane	<10	10	ug/l	8260	10/10/2003	BAS
carbon tetrachloride	<10	10	ug/l	8260	10/10/2003	BAS
Bromodichloromethane	<10	10	ug/l	8260	10/10/2003	BAS
1,2-dichloropropane	<10	10	ug/l	8260	10/10/2003	BAS
cis-1,3-Dichloropropylene	<10	10	ug/l	8260	10/10/2003	BAS
Trichloroethylene	<10	10	ug/l	8260	10/10/2003	BAS
trans-1,3-Dichloropropylene	<10	10	ug/l	8260	10/10/2003	BAS
1,1,2-Trichloroethane	<10	10	ug/l	8260	10/10/2003	BAS
Dibromochloromethane	<10	10	ug/l	8260	10/10/2003	BAS
Bromoform	<10	10	ug/l	8260	10/10/2003	BAS
Tetrachloroethylene	<10	10	ug/l	8260	10/10/2003	BAS
1,1,2,2-Tetrachloroethane	<10	10	ug/l	8260	10/10/2003	BAS
Chlorobenzene	420	10	ug/l	8260	10/10/2003	BAS
2-chloroethyl vinyl ether	<20	20	ug/l	8260	10/10/2003	BAS
Benzene	<10	10	ug/l	8260	10/10/2003	BAS
toluene	<10	10	ug/l	8260	10/10/2003	BAS
ethylbenzene	<10	10	ug/l	8260	10/10/2003	BAS
xylenes(Total)	<10	10	ug/l	8260	10/10/2003	BAS
acetone	<100	100	ug/l	8260	10/10/2003	BAS
Carbon disulfide	<50	50	ug/l	8260	10/10/2003	BAS
2-butanone(MEK)	<100	100	ug/l	8260	10/10/2003	BAS
vinyl acetate	<500	500	ug/l	8260	10/10/2003	BAS
4-methyl-2-pentanone(MIBK)	<500	500	ug/l	8260	10/10/2003	BAS
2-hexanone	<500	500	ug/l	8260	10/10/2003	BAS
Styrene	<10	10	ug/l	8260	10/10/2003	BAS
o-chlorotoluene	<10	10	ug/l	8260	10/10/2003	BAS

R.I. Analytical Laboratories, Inc.**CERTIFICATE OF ANALYSIS**

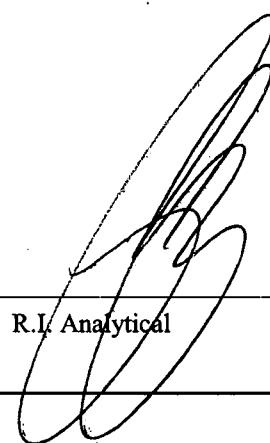
Ciba Specialty Chemicals Corp.

Date Received: 10/03/2003

Work Order #: 0310-14312

Approved by:

R.I. Analytical



Sample #: 005

SAMPLE P-36S**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 10/02/2003 @ 12:00

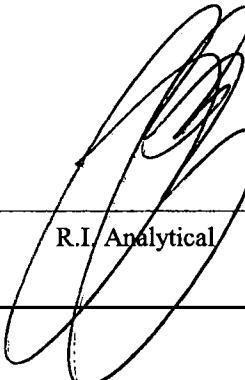
PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,2-Dichlorobenzene	<10	10	ug/l	8260	10/10/2003	BAS
1,3-Dichlorobenzene	<10	10	ug/l	8260	10/10/2003	BAS
1,4-Dichlorobenzene	<10	10	ug/l	8260	10/10/2003	BAS
Surrogates			RANGE	8260	10/10/2003	BAS
Dibromofluoromethane	104		86-118%	8260	10/10/2003	BAS
4-Bromofluorobenzene	95		86-115%	8260	10/10/2003	BAS
Toluene-D8	100		88-110%	8260	10/10/2003	BAS

Method 8260: Detection limits increased as a result of sample dilution. Sample dilution required to achieve target compound response within the calibration range of the analysis.

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Approved by:


R.I. Analytical

Ciba Specialty Chemicals Corp.
 Date Received: 10/03/2003
 Work Order #: 0310-14312

Sample #: 006

SAMPLE MW-1S
SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 10/02/2003 @ 12:40

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.7		SU	EPA 150.1	10/02/2003	RMB
TEMPERATURE (field)	62		F	EPA 170.1	10/02/2003	RMB
SPECIFIC CONDUCTANCE (field)	660	1	µMHOS/CM	EPA 120.1	10/02/2003	RMB
DISSOLVED OXYGEN (Field)	2.1	1.0	mg/l	EPA 360.1	10/02/2003	RMB
Volatile Organic Compounds						
chloromethane	<100	100	ug/l	8260	10/10/2003	BAS
Bromomethane	<100	100	ug/l	8260	10/10/2003	BAS
vinyl chloride	<10	10	ug/l	8260	10/10/2003	BAS
dichlorodifluoromethane	<100	100	ug/l	8260	10/10/2003	BAS
chloroethane	<100	100	ug/l	8260	10/10/2003	BAS
methylene chloride	<50	50	ug/l	8260	10/10/2003	BAS
trichlorofluoromethane	<10	10	ug/l	8260	10/10/2003	BAS
1,1-dichloroethylene	<10	10	ug/l	8260	10/10/2003	BAS
1,1-dichloroethane	<10	10	ug/l	8260	10/10/2003	BAS
trans-1,2-Dichloroethylene	<10	10	ug/l	8260	10/10/2003	BAS
chloroform	<10	10	ug/l	8260	10/10/2003	BAS
1,2-dichloroethane	<10	10	ug/l	8260	10/10/2003	BAS
1,1,1-Trichloroethane	<10	10	ug/l	8260	10/10/2003	BAS
carbon tetrachloride	<10	10	ug/l	8260	10/10/2003	BAS
Bromodichloromethane	<10	10	ug/l	8260	10/10/2003	BAS
1,2-dichloropropane	<10	10	ug/l	8260	10/10/2003	BAS
cis-1,3-Dichloropropylene	<10	10	ug/l	8260	10/10/2003	BAS
Trichloroethylene	<10	10	ug/l	8260	10/10/2003	BAS
trans-1,3-Dichloropropylene	<10	10	ug/l	8260	10/10/2003	BAS
1,1,2-Trichloroethane	<10	10	ug/l	8260	10/10/2003	BAS
Dibromochloromethane	<10	10	ug/l	8260	10/10/2003	BAS
Bromoform	<10	10	ug/l	8260	10/10/2003	BAS
Tetrachloroethylene	<10	10	ug/l	8260	10/10/2003	BAS
1,1,2,2-Tetrachloroethane	<10	10	ug/l	8260	10/10/2003	BAS
Chlorobenzene	1300	10	ug/l	8260	10/10/2003	BAS
2-chloroethyl vinyl ether	<20	20	ug/l	8260	10/10/2003	BAS
Benzene	<10	10	ug/l	8260	10/10/2003	BAS
toluene	<10	10	ug/l	8260	10/10/2003	BAS
ethylbenzene	<10	10	ug/l	8260	10/10/2003	BAS
xylenes(Total)	<10	10	ug/l	8260	10/10/2003	BAS
acetone	<100	100	ug/l	8260	10/10/2003	BAS
Carbon disulfide	<50	50	ug/l	8260	10/10/2003	BAS
2-butanone(MEK)	<100	100	ug/l	8260	10/10/2003	BAS
vinyl acetate	<500	500	ug/l	8260	10/10/2003	BAS
4-methyl-2-pentanone(MIBK)	<500	500	ug/l	8260	10/10/2003	BAS
2-hexanone	<500	500	ug/l	8260	10/10/2003	BAS
Styrene	<10	10	ug/l	8260	10/10/2003	BAS
o-chlorotoluene	<10	10	ug/l	8260	10/10/2003	BAS

R.I. Analytical Laboratories, Inc.**CERTIFICATE OF ANALYSIS**

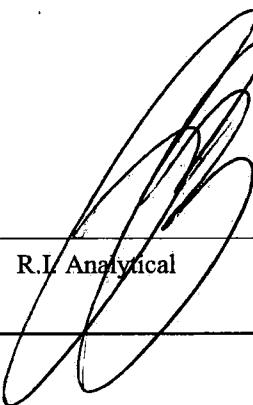
Ciba Specialty Chemicals Corp.

Date Received: 10/03/2003

Work Order #: 0310-14312

Approved by:

R.I. Analytical



Sample #: 006

SAMPLE MW-1S**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 10/02/2003 @ 12:40

PARAMETER	SAMPLE	DET.	LIMIT	UNITS	METHOD	DATE	ANALYZED	ANALYST
	RESULTS							
1,2-Dichlorobenzene	<10		10	ug/l	8260	10/10/2003	BAS	
1,3-Dichlorobenzene	<10		10	ug/l	8260	10/10/2003	BAS	
1,4-Dichlorobenzene	<10		10	ug/l	8260	10/10/2003	BAS	
Surrogates				RANGE	8260	10/10/2003	BAS	
Dibromofluoromethane	106			86-118%	8260	10/10/2003	BAS	
4-Bromofluorobenzene	94			86-115%	8260	10/10/2003	BAS	
Toluene-D8	100			88-110%	8260	10/10/2003	BAS	

Method 8260: Detection limits increased as a result of sample dilution. Sample dilution required to achieve target compound response within the calibration range of the analysis.

R.I. Analytical Laboratories, Inc.

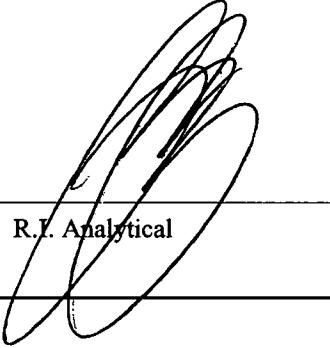
CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 10/03/2003

Work Order #: 0310-14312

Approved by:


R.I. Analytical

Sample #: 007

SAMPLE MW-12S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 10/02/2003 @ 13:50

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.7		SU	EPA 150.1	10/02/2003	RMB
TEMPERATURE (field)	64		F	EPA 170.1	10/02/2003	RMB
SPECIFIC CONDUCTANCE (field)	350	1	uMHOS/CM	EPA 120.1	10/02/2003	RMB
DISSOLVED OXYGEN (Field)	2.0	1.0	mg/l	EPA 360.1	10/02/2003	RMB
Volatile Organic Compounds						
chloromethane	<10	10	ug/l	8260	10/11/2003	BAS
Bromomethane	<10	10	ug/l	8260	10/11/2003	BAS
vinyl chloride	<1	1	ug/l	8260	10/11/2003	BAS
dichlorodifluoromethane	<10	10	ug/l	8260	10/11/2003	BAS
chloroethane	<10	10	ug/l	8260	10/11/2003	BAS
methylene chloride	<5	5	ug/l	8260	10/11/2003	BAS
trichlorofluoromethane	<1	1	ug/l	8260	10/11/2003	BAS
1,1-dichloroethylene	<1	1	ug/l	8260	10/11/2003	BAS
1,1-dichloroethane	<1	1	ug/l	8260	10/11/2003	BAS
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	10/11/2003	BAS
chloroform	<1	1	ug/l	8260	10/11/2003	BAS
1,2-dichloroethane	<1	1	ug/l	8260	10/11/2003	BAS
1,1,1-Trichloroethane	<1	1	ug/l	8260	10/11/2003	BAS
carbon tetrachloride	<1	1	ug/l	8260	10/11/2003	BAS
Bromodichloromethane	<1	1	ug/l	8260	10/11/2003	BAS
1,2-dichloropropane	<1	1	ug/l	8260	10/11/2003	BAS
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	10/11/2003	BAS
Trichloroethylene	<1	1	ug/l	8260	10/11/2003	BAS
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	10/11/2003	BAS
1,1,2-Trichloroethane	2	1	ug/l	8260	10/11/2003	BAS
Dibromochloromethane	<1	1	ug/l	8260	10/11/2003	BAS
Bromoform	<1	1	ug/l	8260	10/11/2003	BAS
Tetrachloroethylene	<1	1	ug/l	8260	10/11/2003	BAS
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	10/11/2003	BAS
Chlorobenzene	<1	1	ug/l	8260	10/11/2003	BAS
2-chloroethyl vinyl ether	<2	2	ug/l	8260	10/11/2003	BAS
Benzene	<1	1	ug/l	8260	10/11/2003	BAS
toluene	<1	1	ug/l	8260	10/11/2003	BAS
ethylbenzene	<1	1	ug/l	8260	10/11/2003	BAS
xylenes(Total)	<1	1	ug/l	8260	10/11/2003	BAS
acetone	<10	10	ug/l	8260	10/11/2003	BAS
Carbon disulfide	<5	5	ug/l	8260	10/11/2003	BAS
2-butanone(MEK)	<10	10	ug/l	8260	10/11/2003	BAS
vinyl acetate	<50	50	ug/l	8260	10/11/2003	BAS
4-methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	10/11/2003	BAS
2-hexanone	<50	50	ug/l	8260	10/11/2003	BAS
Styrene	<1	1	ug/l	8260	10/11/2003	BAS
o-chlorotoluene	<1	1	ug/l	8260	10/11/2003	BAS

R.I. Analytical Laboratories, Inc.**CERTIFICATE OF ANALYSIS**

Ciba Specialty Chemicals Corp.

Date Received: 10/03/2003

Work Order #: 0310-14312

Approved by: _____

R.I. Analytical

Sample #: 007

SAMPLE MW-12S**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 10/02/2003 @ 13:50

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,2-Dichlorobenzene	<1	1	ug/l	8260	10/11/2003	BAS
1,3-Dichlorobenzene	<1	1	ug/l	8260	10/11/2003	BAS
1,4-Dichlorobenzene	<1	1	ug/l	8260	10/11/2003	BAS
Surrogates			RANGE	8260	10/11/2003	BAS
Dibromofluoromethane	106		86-118%	8260	10/11/2003	BAS
4-Bromofluorobenzene	95		86-115%	8260	10/11/2003	BAS
Toluene-D8	100		88-110%	8260	10/11/2003	BAS

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 10/03/2003

Work Order #: 0310-14312

Approved by:

R.I. Analytical

Sample #: 008

SAMPLE MW-4S
SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 10/02/2003 @ 14:35

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.4		SU	EPA 150.1	10/02/2003	RMB
TEMPERATURE (field)	65		F	EPA 170.1	10/02/2003	RMB
SPECIFIC CONDUCTANCE (field)	480	1	uMHOS/CM	EPA 120.1	10/02/2003	RMB
DISSOLVED OXYGEN (Field)	4.2	1.0	mg/l	EPA 360.1	10/02/2003	RMB
Volatile Organic Compounds						
chloromethane	<10	10	ug/l	8260	10/11/2003	BAS
Bromomethane	<10	10	ug/l	8260	10/11/2003	BAS
vinyl chloride	<1	1	ug/l	8260	10/11/2003	BAS
dichlorodifluoromethane	<10	10	ug/l	8260	10/11/2003	BAS
chloroethane	<10	10	ug/l	8260	10/11/2003	BAS
methylene chloride	<5	5	ug/l	8260	10/11/2003	BAS
trichlorofluoromethane	<1	1	ug/l	8260	10/11/2003	BAS
1,1-dichloroethylene	<1	1	ug/l	8260	10/11/2003	BAS
1,1-dichloroethane	<1	1	ug/l	8260	10/11/2003	BAS
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	10/11/2003	BAS
chloroform	<1	1	ug/l	8260	10/11/2003	BAS
1,2-dichloroethane	<1	1	ug/l	8260	10/11/2003	BAS
1,1,1-Trichloroethane	<1	1	ug/l	8260	10/11/2003	BAS
carbon tetrachloride	<1	1	ug/l	8260	10/11/2003	BAS
Bromodichloromethane	<1	1	ug/l	8260	10/11/2003	BAS
1,2-dichloropropane	<1	1	ug/l	8260	10/11/2003	BAS
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	10/11/2003	BAS
Trichloroethylene	<1	1	ug/l	8260	10/11/2003	BAS
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	10/11/2003	BAS
1,1,2-Trichloroethane	<1	1	ug/l	8260	10/11/2003	BAS
Dibromochloromethane	<1	1	ug/l	8260	10/11/2003	BAS
Bromoform	<1	1	ug/l	8260	10/11/2003	BAS
Tetrachloroethylene	<1	1	ug/l	8260	10/11/2003	BAS
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	10/11/2003	BAS
Chlorobenzene	11	1	ug/l	8260	10/11/2003	BAS
2-chloroethyl vinyl ether	<2	2	ug/l	8260	10/11/2003	BAS
Benzene	<1	1	ug/l	8260	10/11/2003	BAS
toluene	<1	1	ug/l	8260	10/11/2003	BAS
ethylbenzene	<1	1	ug/l	8260	10/11/2003	BAS
xylenes(Total)	4	1	ug/l	8260	10/11/2003	BAS
acetone	<10	10	ug/l	8260	10/11/2003	BAS
Carbon disulfide	<5	5	ug/l	8260	10/11/2003	BAS
2-butanone(MEK)	<10	10	ug/l	8260	10/11/2003	BAS
vinyl acetate	<50	50	ug/l	8260	10/11/2003	BAS
4-methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	10/11/2003	BAS
2-hexanone	<50	50	ug/l	8260	10/11/2003	BAS
Styrene	<1	1	ug/l	8260	10/11/2003	BAS
o-chlorotoluene	72	1	ug/l	8260	10/11/2003	BAS

R.I. Analytical Laboratories, Inc.**CERTIFICATE OF ANALYSIS**

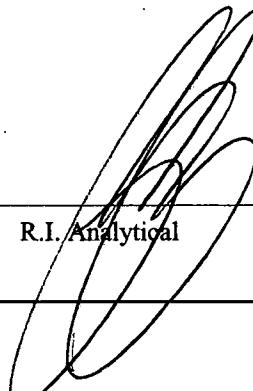
Ciba Specialty Chemicals Corp.

Date Received: 10/03/2003

Work Order #: 0310-14312

Approved by:

R.I. Analytical



Sample #: 008

SAMPLE MW-4S**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 10/02/2003 @ 14:35

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,2-Dichlorobenzene	6	1	ug/l	8260	10/11/2003	BAS
1,3-Dichlorobenzene	<1	1	ug/l	8260	10/11/2003	BAS
1,4-Dichlorobenzene	<1	1	ug/l	8260	10/11/2003	BAS
Surrogates			RANGE	8260	10/11/2003	BAS
Dibromofluoromethane	105		86-118%	8260	10/11/2003	BAS
4-Bromofluorobenzene	96		86-115%	8260	10/11/2003	BAS
Toluene-D8	99		88-110%	8260	10/11/2003	BAS

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 10/03/2003

Work Order #: 0310-14312

Approved by:

R.I. Analytical

Sample #: 009

SAMPLE PW-120 PUMP HOUSE
SAMPLE TYPE: GRAB
SAMPLE DATE/TIME: 10/03/2003 @ 10:50

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.8		SU	EPA 150.1	10/03/2003	RMB
TEMPERATURE (field)	58		F	EPA 170.1	10/03/2003	RMB
SPECIFIC CONDUCTANCE (field)	480	1	uMHOS/CM	EPA 120.1	10/03/2003	RMB
DISSOLVED OXYGEN (Field)	<1.0	1.0	mg/l	EPA 360.1	10/03/2003	RMB
Volatile Organic Compounds						
chloromethane	<500	500	ug/l	8260	10/11/2003	BAS
Bromomethane	<500	500	ug/l	8260	10/11/2003	BAS
vinyl chloride	<50	50	ug/l	8260	10/11/2003	BAS
dichlorodifluoromethane	<500	500	ug/l	8260	10/11/2003	BAS
chloroethane	<500	500	ug/l	8260	10/11/2003	BAS
methylene chloride	<300	300	ug/l	8260	10/11/2003	BAS
trichlorofluoromethane	<50	50	ug/l	8260	10/11/2003	BAS
1,1-dichloroethylene	<50	50	ug/l	8260	10/11/2003	BAS
1,1-dichloroethane	<50	50	ug/l	8260	10/11/2003	BAS
trans-1,2-Dichloroethylene	<50	50	ug/l	8260	10/11/2003	BAS
chloroform	<50	50	ug/l	8260	10/11/2003	BAS
1,2-dichloroethane	<50	50	ug/l	8260	10/11/2003	BAS
1,1,1-Trichloroethane	<50	50	ug/l	8260	10/11/2003	BAS
carbon tetrachloride	<50	50	ug/l	8260	10/11/2003	BAS
Bromodichloromethane	<50	50	ug/l	8260	10/11/2003	BAS
1,2-dichloropropane	<50	50	ug/l	8260	10/11/2003	BAS
cis-1,3-Dichloropropylene	<50	50	ug/l	8260	10/11/2003	BAS
Trichloroethylene	52	50	ug/l	8260	10/11/2003	BAS
trans-1,3-Dichloropropylene	<50	50	ug/l	8260	10/11/2003	BAS
1,1,2-Trichloroethane	<50	50	ug/l	8260	10/11/2003	BAS
Dibromochloromethane	<50	50	ug/l	8260	10/11/2003	BAS
Bromoform	<50	50	ug/l	8260	10/11/2003	BAS
Tetrachloroethylene	66	50	ug/l	8260	10/11/2003	BAS
1,1,2,2-Tetrachloroethane	<50	50	ug/l	8260	10/11/2003	BAS
Chlorobenzene	2200	50	ug/l	8260	10/11/2003	BAS
2-chloroethyl vinyl ether	<100	100	ug/l	8260	10/11/2003	BAS
Benzene	<50	50	ug/l	8260	10/11/2003	BAS
toluene	<50	50	ug/l	8260	10/11/2003	BAS
ethylbenzene	<50	50	ug/l	8260	10/11/2003	BAS
xlenes(Total)	<50	50	ug/l	8260	10/11/2003	BAS
acetone	<500	500	ug/l	8260	10/11/2003	BAS
Carbon disulfide	<300	300	ug/l	8260	10/11/2003	BAS
2-butanone(MEK)	<500	500	ug/l	8260	10/11/2003	BAS
vinyl acetate	<2500	2500	ug/l	8260	10/11/2003	BAS
4-methyl-2-pentanone(MIBK)	<2500	2500	ug/l	8260	10/11/2003	BAS
2-hexanone	<2500	2500	ug/l	8260	10/11/2003	BAS
Styrene	<50	50	ug/l	8260	10/11/2003	BAS
o-chlorotoluene	130	50	ug/l	8260	10/11/2003	BAS

R.I. Analytical Laboratories, Inc.**CERTIFICATE OF ANALYSIS**

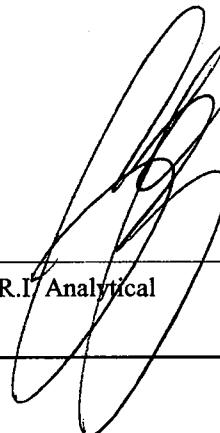
Ciba Specialty Chemicals Corp.

Date Received: 10/03/2003

Work Order #: 0310-14312

Approved by: _____

R.I. Analytical



Sample #: 009

SAMPLE PW-120 PUMP HOUSE**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 10/03/2003 @ 10:50

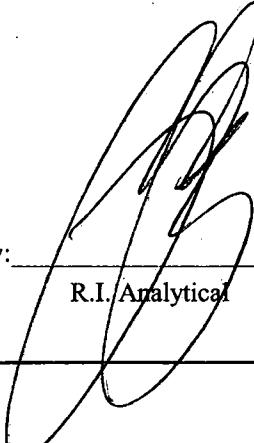
PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,2-Dichlorobenzene	3300	50	ug/l	8260	10/11/2003	BAS
1,3-Dichlorobenzene	<50	50	ug/l	8260	10/11/2003	BAS
1,4-Dichlorobenzene	<50	50	ug/l	8260	10/11/2003	BAS
Surrogates			RANGE	8260	10/11/2003	BAS
Dibromofluoromethane	106		86-118%	8260	10/11/2003	BAS
4-Bromofluorobenzene	94		86-115%	8260	10/11/2003	BAS
Toluene-D8	101		88-110%	8260	10/11/2003	BAS

Method 8260: Detection limits increased as a result of sample dilution. Sample dilution required to achieve target compound response within the calibration range of the analysis.

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Approved by:


R.I. Analytical

Ciba Specialty Chemicals Corp.

Date Received: 10/03/2003

Work Order #: 0310-14312

Sample #: 010

SAMPLE SW-120

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 10/03/2003 @ 10:55

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.9		SU	EPA 150.1	10/03/2003	RMB
TEMPERATURE (field)	60		F	EPA 170.1	10/03/2003	RMB
SPECIFIC CONDUCTANCE (field)	450	1	uMHOS/CM	EPA 120.1	10/03/2003	RMB
DISSOLVED OXYGEN (Field)	3.0	1.0	mg/l	EPA 360.1	10/03/2003	RMB
Volatile Organic Compounds						
chloromethane	<10	10	ug/l	8260	10/15/2003	BAS
Bromomethane	<10	10	ug/l	8260	10/15/2003	BAS
vinyl chloride	5	1	ug/l	8260	10/15/2003	BAS
dichlorodifluoromethane	<10	10	ug/l	8260	10/15/2003	BAS
chloroethane	<10	10	ug/l	8260	10/15/2003	BAS
methylene chloride	<5	5	ug/l	8260	10/15/2003	BAS
trichlorofluoromethane	<1	1	ug/l	8260	10/15/2003	BAS
1,1-dichloroethylene	<1	1	ug/l	8260	10/15/2003	BAS
1,1-dichloroethane	<1	1	ug/l	8260	10/15/2003	BAS
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	10/15/2003	BAS
chloroform	<1	1	ug/l	8260	10/15/2003	BAS
1,2-dichloroethane	<1	1	ug/l	8260	10/15/2003	BAS
1,1,1-Trichloroethane	<1	1	ug/l	8260	10/15/2003	BAS
carbon tetrachloride	<1	1	ug/l	8260	10/15/2003	BAS
Bromodichloromethane	<1	1	ug/l	8260	10/15/2003	BAS
1,2-dichloropropane	<1	1	ug/l	8260	10/15/2003	BAS
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	10/15/2003	BAS
Trichloroethylene	<1	1	ug/l	8260	10/15/2003	BAS
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	10/15/2003	BAS
1,1,2-Trichloroethane	<1	1	ug/l	8260	10/15/2003	BAS
Dibromochloromethane	<1	1	ug/l	8260	10/15/2003	BAS
Bromoform	<1	1	ug/l	8260	10/15/2003	BAS
Tetrachloroethylene	<1	1	ug/l	8260	10/15/2003	BAS
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	10/15/2003	BAS
Chlorobenzene	44	1	ug/l	8260	10/15/2003	BAS
2-chloroethyl vinyl ether	<2	2	ug/l	8260	10/15/2003	BAS
Benzene	<1	1	ug/l	8260	10/15/2003	BAS
toluene	<1	1	ug/l	8260	10/15/2003	BAS
ethylbenzene	<1	1	ug/l	8260	10/15/2003	BAS
xylanes(Total)	<1	1	ug/l	8260	10/15/2003	BAS
acetone	<10	10	ug/l	8260	10/15/2003	BAS
Carbon disulfide	<5	5	ug/l	8260	10/15/2003	BAS
2-butanone(MEK)	<10	10	ug/l	8260	10/15/2003	BAS
vinyl acetate	<50	50	ug/l	8260	10/15/2003	BAS
4-methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	10/15/2003	BAS
2-hexanone	<50	50	ug/l	8260	10/15/2003	BAS
Styrene	<1	1	ug/l	8260	10/15/2003	BAS
o-chlorotoluene	<1	1	ug/l	8260	10/15/2003	BAS

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 10/03/2003

Work Order #: 0310-14312

Approved by:

R.I. Analytical

Sample #: 010

SAMPLE SW-120**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 10/03/2003 @ 10:55

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,2-Dichlorobenzene	<1	1	ug/l	8260	10/15/2003	BAS
1,3-Dichlorobenzene	<1	1	ug/l	8260	10/15/2003	BAS
1,4-Dichlorobenzene	<1	1	ug/l	8260	10/15/2003	BAS
Surrogates			RANGE	8260	10/15/2003	BAS
Dibromofluoromethane	103		86-118%	8260	10/15/2003	BAS
4-Bromofluorobenzene	94		86-115%	8260	10/15/2003	BAS
Toluene-D8	100		88-110%	8260	10/15/2003	BAS

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

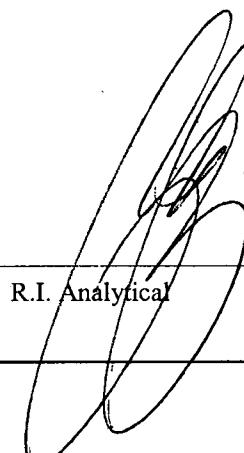
Ciba Specialty Chemicals Corp.

Date Received: 10/03/2003

Work Order #: 0310-14312

Approved by:

R.I. Analytical



Sample #: 011

SAMPLE PW-130 PUMP HOUSE
SAMPLE TYPE: GRAB
SAMPLE DATE/TIME: 10/03/2003 @ 11:35

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.8		SU	EPA 150.1	10/03/2003	RMB
TEMPERATURE (field)	59		F	EPA 170.1	10/03/2003	RMB
SPECIFIC CONDUCTANCE (field)	420	1	uMHOS/CM	EPA 120.1	10/03/2003	RMB
DISSOLVED OXYGEN (Field)	6.8	1.0	mg/l	EPA 360.1	10/03/2003	RMB

Volatile Organic Compounds

chloromethane	<100	100	ug/l	8260	10/15/2003	BAS
Bromomethane	<100	100	ug/l	8260	10/15/2003	BAS
vinyl chloride	<10	10	ug/l	8260	10/15/2003	BAS
dichlorodifluoromethane	<100	100	ug/l	8260	10/15/2003	BAS
chloroethane	<100	100	ug/l	8260	10/15/2003	BAS
methylene chloride	<50	50	ug/l	8260	10/15/2003	BAS
trichlorofluoromethane	<10	10	ug/l	8260	10/15/2003	BAS
1,1-dichloroethylene	<10	10	ug/l	8260	10/15/2003	BAS
1,1-dichloroethane	<10	10	ug/l	8260	10/15/2003	BAS
trans-1,2-Dichloroethylene	<10	10	ug/l	8260	10/15/2003	BAS
chloroform	<10	10	ug/l	8260	10/15/2003	BAS
1,2-dichloroethane	<10	10	ug/l	8260	10/15/2003	BAS
1,1,1-Trichloroethane	<10	10	ug/l	8260	10/15/2003	BAS
carbon tetrachloride	<10	10	ug/l	8260	10/15/2003	BAS
Bromodichloromethane	<10	10	ug/l	8260	10/15/2003	BAS
1,2-dichloropropane	<10	10	ug/l	8260	10/15/2003	BAS
cis-1,3-Dichloropropylene	<10	10	ug/l	8260	10/15/2003	BAS
Trichloroethylene	<10	10	ug/l	8260	10/15/2003	BAS
trans-1,3-Dichloropropylene	<10	10	ug/l	8260	10/15/2003	BAS
1,1,2-Trichloroethane	<10	10	ug/l	8260	10/15/2003	BAS
Dibromochloromethane	<10	10	ug/l	8260	10/15/2003	BAS
Bromoform	<10	10	ug/l	8260	10/15/2003	BAS
Tetrachloroethylene	<10	10	ug/l	8260	10/15/2003	BAS
1,1,2,2-Tetrachloroethane	<10	10	ug/l	8260	10/15/2003	BAS
Chlorobenzene	160	10	ug/l	8260	10/15/2003	BAS
2-chloroethyl vinyl ether	<20	20	ug/l	8260	10/15/2003	BAS
Benzene	<10	10	ug/l	8260	10/15/2003	BAS
toluene	22	10	ug/l	8260	10/15/2003	BAS
ethylbenzene	<10	10	ug/l	8260	10/15/2003	BAS
xylenes(Total)	<10	10	ug/l	8260	10/15/2003	BAS
acetone	<100	100	ug/l	8260	10/15/2003	BAS
Carbon disulfide	<50	50	ug/l	8260	10/15/2003	BAS
2-butanone(MEK)	<100	100	ug/l	8260	10/15/2003	BAS
vinyl acetate	<500	500	ug/l	8260	10/15/2003	BAS
4-methyl-2-pentanone(MIBK)	<500	500	ug/l	8260	10/15/2003	BAS
2-hexanone	<500	500	ug/l	8260	10/15/2003	BAS
Styrene	<10	10	ug/l	8260	10/15/2003	BAS
o-chlorotoluene	120	10	ug/l	8260	10/15/2003	BAS

R.I. Analytical Laboratories, Inc.**CERTIFICATE OF ANALYSIS**

Ciba Specialty Chemicals Corp.

Date Received: 10/03/2003

Work Order #: 0310-14312

Approved by:

R.I. Analytical

Sample #: 011

SAMPLE PW-130 PUMP HOUSE
SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 10/03/2003 @ 11:35

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,2-Dichlorobenzene	20	10	ug/l	8260	10/15/2003	BAS
1,3-Dichlorobenzene	<10	10	ug/l	8260	10/15/2003	BAS
1,4-Dichlorobenzene	<10	10	ug/l	8260	10/15/2003	BAS
Surrogates			RANGE	8260	10/15/2003	BAS
Dibromofluoromethane	104		86-118%	8260	10/15/2003	BAS
4-Bromofluorobenzene	95		86-115%	8260	10/15/2003	BAS
Toluene-D8	100		88-110%	8260	10/15/2003	BAS

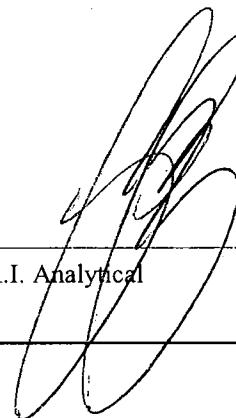
Method 8260: Detection limits increased as a result of sample dilution. Sample dilution required to achieve target compound response within the calibration range of the analysis.

R.I. Analytical Laboratories, Inc.**CERTIFICATE OF ANALYSIS**

Ciba Specialty Chemicals Corp.
 Date Received: 10/03/2003
 Work Order #: 0310-14312

Approved by:

R.I. Analytical



Sample #: 012

SAMPLE P-35S
SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 10/03/2003 @ 11:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	7.1		SU	EPA 150.1	10/03/2003	RMB
TEMPERATURE (field)	64		F	EPA 170.1	10/03/2003	RMB
SPECIFIC CONDUCTANCE (field)	740	1	µMHOS/CM	EPA 120.1	10/03/2003	RMB
DISSOLVED OXYGEN (Field)	2.5	1.0	mg/l	EPA 360.1	10/03/2003	RMB
Volatile Organic Compounds						
chloromethane	<100	100	ug/l	8260	10/15/2003	BAS
Bromomethane	<100	100	ug/l	8260	10/15/2003	BAS
vinyl chloride	<10	10	ug/l	8260	10/15/2003	BAS
dichlorodifluoromethane	<100	100	ug/l	8260	10/15/2003	BAS
chloroethane	<100	100	ug/l	8260	10/15/2003	BAS
methylene chloride	<50	50	ug/l	8260	10/15/2003	BAS
trichlorofluoromethane	<10	10	ug/l	8260	10/15/2003	BAS
1,1-dichloroethylene	<10	10	ug/l	8260	10/15/2003	BAS
1,1-dichloroethane	<10	10	ug/l	8260	10/15/2003	BAS
trans-1,2-Dichloroethylene	<10	10	ug/l	8260	10/15/2003	BAS
chloroform	<10	10	ug/l	8260	10/15/2003	BAS
1,2-dichloroethane	<10	10	ug/l	8260	10/15/2003	BAS
1,1,1-Trichloroethane	<10	10	ug/l	8260	10/15/2003	BAS
carbon tetrachloride	<10	10	ug/l	8260	10/15/2003	BAS
Bromodichloromethane	<10	10	ug/l	8260	10/15/2003	BAS
1,2-dichloropropane	<10	10	ug/l	8260	10/15/2003	BAS
cis-1,3-Dichloropropylene	<10	10	ug/l	8260	10/15/2003	BAS
Trichloroethylene	<10	10	ug/l	8260	10/15/2003	BAS
trans-1,3-Dichloropropylene	<10	10	ug/l	8260	10/15/2003	BAS
1,1,2-Trichloroethane	<10	10	ug/l	8260	10/15/2003	BAS
Dibromochloromethane	<10	10	ug/l	8260	10/15/2003	BAS
Bromoform	<10	10	ug/l	8260	10/15/2003	BAS
Tetrachloroethylene	<10	10	ug/l	8260	10/15/2003	BAS
1,1,2,2-Tetrachloroethane	<10	10	ug/l	8260	10/15/2003	BAS
Chlorobenzene	610	10	ug/l	8260	10/15/2003	BAS
2-chloroethyl vinyl ether	<20	20	ug/l	8260	10/15/2003	BAS
Benzene	<10	10	ug/l	8260	10/15/2003	BAS
toluene	<10	10	ug/l	8260	10/15/2003	BAS
ethylbenzene	<10	10	ug/l	8260	10/15/2003	BAS
xylenes(Total)	<10	10	ug/l	8260	10/15/2003	BAS
acetone	<100	100	ug/l	8260	10/15/2003	BAS
Carbon disulfide	<50	50	ug/l	8260	10/15/2003	BAS
2-butanone(MEK)	<100	100	ug/l	8260	10/15/2003	BAS
vinyl acetate	<500	500	ug/l	8260	10/15/2003	BAS
4-methyl-2-pentanone(MIBK)	<500	500	ug/l	8260	10/15/2003	BAS
2-hexanone	<500	500	ug/l	8260	10/15/2003	BAS
Styrene	<10	10	ug/l	8260	10/15/2003	BAS
o-chlorotoluene	67	10	ug/l	8260	10/15/2003	BAS

R.I. Analytical Laboratories, Inc.**CERTIFICATE OF ANALYSIS**

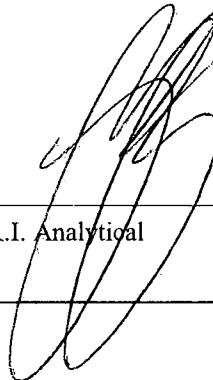
Ciba Specialty Chemicals Corp.

Date Received: 10/03/2003

Work Order #: 0310-14312

Approved by:

R.I. Analytical



Sample #: 012

SAMPLE P-35S**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 10/03/2003 @ 11:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,2-Dichlorobenzene	240	10	ug/l	8260	10/15/2003	BAS
1,3-Dichlorobenzene	<10	10	ug/l	8260	10/15/2003	BAS
1,4-Dichlorobenzene	<10	10	ug/l	8260	10/15/2003	BAS
Surrogates			RANGE	8260	10/15/2003	BAS
Dibromofluoromethane	104		86-118%	8260	10/15/2003	BAS
4-Bromofluorobenzene	96		86-115%	8260	10/15/2003	BAS
Toluene-D8	98		88-110%	8260	10/15/2003	BAS

Method 8260: Detection limits increased as a result of sample dilution. Sample dilution required to achieve target compound response within the calibration range of the analysis.

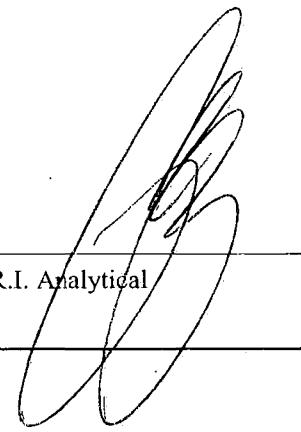
R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.
 Date Received: 10/03/2003
 Work Order #: 0310-14312

Approved by:

R.I. Analytical



Sample #: 013

SAMPLE MW-2S
SAMPLE TYPE: GRAB

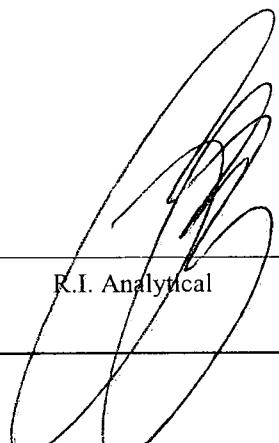
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PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.9		SU	EPA 150.1	10/03/2003	RMB
TEMPERATURE (field)	62		F	EPA 170.1	10/03/2003	RMB
SPECIFIC CONDUCTANCE (field)	690	1	uMHOS/CM	EPA 120.1	10/03/2003	RMB
DISSOLVED OXYGEN (Field)	<1.0	1.0	mg/l	EPA 360.1	10/03/2003	RMB
Volatile Organic Compounds						
chloromethane	<500	500	ug/l	8260	10/15/2003	BAS
Bromomethane	<500	500	ug/l	8260	10/15/2003	BAS
vinyl chloride	88	50	ug/l	8260	10/15/2003	BAS
dichlorodifluoromethane	<500	500	ug/l	8260	10/15/2003	BAS
chloroethane	<500	500	ug/l	8260	10/15/2003	BAS
methylene chloride	<300	300	ug/l	8260	10/15/2003	BAS
trichlorofluoromethane	<50	50	ug/l	8260	10/15/2003	BAS
1,1-dichloroethylene	<50	50	ug/l	8260	10/15/2003	BAS
1,1-dichloroethane	<50	50	ug/l	8260	10/15/2003	BAS
trans-1,2-Dichloroethylene	<50	50	ug/l	8260	10/15/2003	BAS
chloroform	<50	50	ug/l	8260	10/15/2003	BAS
1,2-dichloroethane	<50	50	ug/l	8260	10/15/2003	BAS
1,1,1-Trichloroethane	<50	50	ug/l	8260	10/15/2003	BAS
carbon tetrachloride	<50	50	ug/l	8260	10/15/2003	BAS
Bromodichloromethane	<50	50	ug/l	8260	10/15/2003	BAS
1,2-dichloropropane	<50	50	ug/l	8260	10/15/2003	BAS
cis-1,3-Dichloropropylene	<50	50	ug/l	8260	10/15/2003	BAS
Trichloroethylene	<50	50	ug/l	8260	10/15/2003	BAS
trans-1,3-Dichloropropylene	<50	50	ug/l	8260	10/15/2003	BAS
1,1,2-Trichloroethane	<50	50	ug/l	8260	10/15/2003	BAS
Dibromochloromethane	<50	50	ug/l	8260	10/15/2003	BAS
Bromoform	<50	50	ug/l	8260	10/15/2003	BAS
Tetrachloroethylene	<50	50	ug/l	8260	10/15/2003	BAS
1,1,2,2-Tetrachloroethane	<50	50	ug/l	8260	10/15/2003	BAS
Chlorobenzene	7000	50	ug/l	8260	10/15/2003	BAS
2-chloroethyl vinyl ether	<100	100	ug/l	8260	10/15/2003	BAS
Benzene	<50	50	ug/l	8260	10/15/2003	BAS
toluene	120	50	ug/l	8260	10/15/2003	BAS
ethylbenzene	<50	50	ug/l	8260	10/15/2003	BAS
xylenes(Total)	<50	50	ug/l	8260	10/15/2003	BAS
acetone	<500	500	ug/l	8260	10/15/2003	BAS
Carbon disulfide	<300	300	ug/l	8260	10/15/2003	BAS
2-butanone(MEK)	<500	500	ug/l	8260	10/15/2003	BAS
vinyl acetate	<2500	2500	ug/l	8260	10/15/2003	BAS
4-methyl-2-pentanone(MIBK)	<2500	2500	ug/l	8260	10/15/2003	BAS
2-hexanone	<2500	2500	ug/l	8260	10/15/2003	BAS
Styrene	<50	50	ug/l	8260	10/15/2003	BAS
o-chlorotoluene	<50	50	ug/l	8260	10/15/2003	BAS

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Approved by:


R.I. Analytical

Ciba Specialty Chemicals Corp.

Date Received: 10/03/2003

Work Order #: 0310-14312

Sample #: 013

SAMPLE MW-2S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 10/03/2003 @ 12:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,2-Dichlorobenzene	500	50	ug/l	8260	10/15/2003	BAS
1,3-Dichlorobenzene	<50	50	ug/l	8260	10/15/2003	BAS
1,4-Dichlorobenzene	<50	50	ug/l	8260	10/15/2003	BAS
Surrogates			RANGE	8260	10/15/2003	BAS
Dibromofluoromethane	103		86-118%	8260	10/15/2003	BAS
4-Bromofluorobenzene	94		86-115%	8260	10/15/2003	BAS
Toluene-D8	101		88-110%	8260	10/15/2003	BAS

Method 8260: Detection limits increased as a result of sample dilution. Sample dilution required to achieve target compound response within the calibration range of the analysis.

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

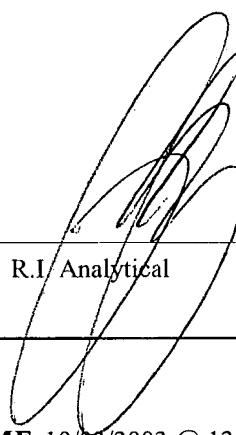
Ciba Specialty Chemicals Corp.

Date Received: 10/03/2003

Work Order #: 0310-14312

Approved by:

R.I. Analytical



Sample #: 014

SAMPLE MW-21S**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 10/03/2003 @ 13:10

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.6		SU	EPA 150.1	10/03/2003	RMB
TEMPERATURE (field)	64		F	EPA 170.1	10/03/2003	RMB
SPECIFIC CONDUCTANCE (field)	340	1	uMHOS/CM	EPA 120.1	10/03/2003	RMB
DISSOLVED OXYGEN (Field)	1.8	1.0	mg/l	EPA 360.1	10/03/2003	RMB
Volatile Organic Compounds						
chloromethane	<10	10	ug/l	8260	10/15/2003	BAS
Bromomethane	<10	10	ug/l	8260	10/15/2003	BAS
vinyl chloride	1	1	ug/l	8260	10/15/2003	BAS
dichlorodifluoromethane	<10	10	ug/l	8260	10/15/2003	BAS
chloroethane	<10	10	ug/l	8260	10/15/2003	BAS
methylene chloride	<5	5	ug/l	8260	10/15/2003	BAS
trichlorofluoromethane	<1	1	ug/l	8260	10/15/2003	BAS
1,1-dichloroethylene	<1	1	ug/l	8260	10/15/2003	BAS
1,1-dichloroethane	<1	1	ug/l	8260	10/15/2003	BAS
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	10/15/2003	BAS
chloroform	<1	1	ug/l	8260	10/15/2003	BAS
1,2-dichloroethane	<1	1	ug/l	8260	10/15/2003	BAS
1,1,1-Trichloroethane	<1	1	ug/l	8260	10/15/2003	BAS
carbon tetrachloride	<1	1	ug/l	8260	10/15/2003	BAS
Bromodichloromethane	<1	1	ug/l	8260	10/15/2003	BAS
1,2-dichloropropane	<1	1	ug/l	8260	10/15/2003	BAS
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	10/15/2003	BAS
Trichloroethylene	2	1	ug/l	8260	10/15/2003	BAS
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	10/15/2003	BAS
1,1,2-Trichloroethane	<1	1	ug/l	8260	10/15/2003	BAS
Dibromochloromethane	<1	1	ug/l	8260	10/15/2003	BAS
Bromoform	<1	1	ug/l	8260	10/15/2003	BAS
Tetrachloroethylene	4	1	ug/l	8260	10/15/2003	BAS
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	10/15/2003	BAS
Chlorobenzene	10	1	ug/l	8260	10/15/2003	BAS
2-chloroethyl vinyl ether	<2	2	ug/l	8260	10/15/2003	BAS
Benzene	<1	1	ug/l	8260	10/15/2003	BAS
toluene	38	1	ug/l	8260	10/15/2003	BAS
ethylbenzene	18	1	ug/l	8260	10/15/2003	BAS
xylenes(Total)	72	1	ug/l	8260	10/15/2003	BAS
acetone	<10	10	ug/l	8260	10/15/2003	BAS
Carbon disulfide	<5	5	ug/l	8260	10/15/2003	BAS
2-butanone(MEK)	<10	10	ug/l	8260	10/15/2003	BAS
vinyl acetate	<50	50	ug/l	8260	10/15/2003	BAS
4-methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	10/15/2003	BAS
2-hexanone	<50	50	ug/l	8260	10/15/2003	BAS
Styrene	<1	1	ug/l	8260	10/15/2003	BAS
o-chlorotoluene	3300	1	ug/l	8260	10/15/2003	BAS

R.I. Analytical Laboratories, Inc.**CERTIFICATE OF ANALYSIS**

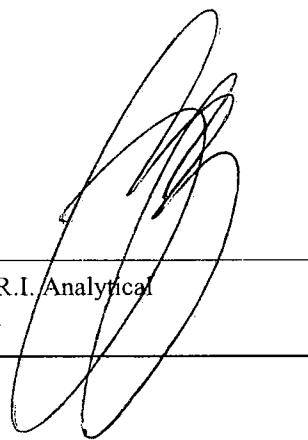
Ciba Specialty Chemicals Corp.

Date Received: 10/03/2003

Work Order #: 0310-14312

Approved by:

R.I. Analytical



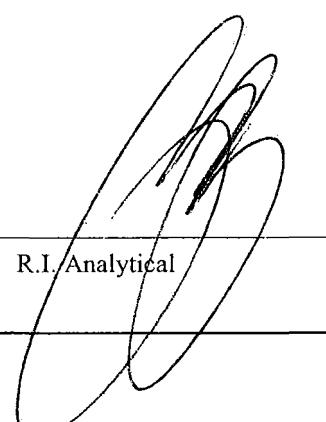
Sample #: 014

SAMPLE MW-21S**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 10/03/2003 @ 13:10

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,2-Dichlorobenzene	6	1	ug/l	8260	10/15/2003	BAS
1,3-Dichlorobenzene	<1	1	ug/l	8260	10/15/2003	BAS
1,4-Dichlorobenzene	<1	1	ug/l	8260	10/15/2003	BAS
Surrogates			RANGE	8260	10/15/2003	BAS
Dibromofluoromethane	104		86-118%	8260	10/15/2003	BAS
4-Bromofluorobenzene	96		86-115%	8260	10/15/2003	BAS
Toluene-D8	100		88-110%	8260	10/15/2003	BAS

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS



Approved by: _____
R.I. Analytical

Ciba Specialty Chemicals Corp.

Date Received: 10/03/2003

Work Order #: 0310-14312

Sample #: 015

SAMPLE TRIP BLANK**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 10/02/2003 @ 08:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Volatile Organic Compounds						
chloromethane	<10	10	ug/l	8260	10/16/2003	BAS
Bromomethane	<10	10	ug/l	8260	10/16/2003	BAS
vinyl chloride	<1	1	ug/l	8260	10/16/2003	BAS
dichlorodifluoromethane	<10	10	ug/l	8260	10/16/2003	BAS
chloroethane	<10	10	ug/l	8260	10/16/2003	BAS
methylene chloride	<5	5	ug/l	8260	10/16/2003	BAS
trichlorofluoromethane	<1	1	ug/l	8260	10/16/2003	BAS
1,1-dichloroethylene	<1	1	ug/l	8260	10/16/2003	BAS
1,1-dichloroethane	<1	1	ug/l	8260	10/16/2003	BAS
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	10/16/2003	BAS
chloroform	<1	1	ug/l	8260	10/16/2003	BAS
1,2-dichloroethane	<1	1	ug/l	8260	10/16/2003	BAS
1,1,1-Trichloroethane	<1	1	ug/l	8260	10/16/2003	BAS
carbon tetrachloride	<1	1	ug/l	8260	10/16/2003	BAS
Bromodichloromethane	<1	1	ug/l	8260	10/16/2003	BAS
1,2-dichloropropane	<1	1	ug/l	8260	10/16/2003	BAS
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	10/16/2003	BAS
Trichloroethylene	<1	1	ug/l	8260	10/16/2003	BAS
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	10/16/2003	BAS
1,1,2-Trichloroethane	<1	1	ug/l	8260	10/16/2003	BAS
Dibromochloromethane	<1	1	ug/l	8260	10/16/2003	BAS
Bromoform	<1	1	ug/l	8260	10/16/2003	BAS
Tetrachloroethylene	<1	1	ug/l	8260	10/16/2003	BAS
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	10/16/2003	BAS
Chlorobenzene	<1	1	ug/l	8260	10/16/2003	BAS
2-chloroethyl vinyl ether	<2	2	ug/l	8260	10/16/2003	BAS
Benzene	<1	1	ug/l	8260	10/16/2003	BAS
toluene	<1	1	ug/l	8260	10/16/2003	BAS
ethylbenzene	<1	1	ug/l	8260	10/16/2003	BAS
xylenes(Total)	<1	1	ug/l	8260	10/16/2003	BAS
acetone	<10	10	ug/l	8260	10/16/2003	BAS
Carbon disulfide	<5	5	ug/l	8260	10/16/2003	BAS
2-butanone(MEK)	<10	10	ug/l	8260	10/16/2003	BAS
vinyl acetate	<50	50	ug/l	8260	10/16/2003	BAS
4-methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	10/16/2003	BAS
2-hexanone	<50	50	ug/l	8260	10/16/2003	BAS
Styrene	<1	1	ug/l	8260	10/16/2003	BAS
o-chlorotoluene	<1	1	ug/l	8260	10/16/2003	BAS
1,2-Dichlorobenzene	<1	1	ug/l	8260	10/16/2003	BAS
1,3-Dichlorobenzene	<1	1	ug/l	8260	10/16/2003	BAS
1,4-Dichlorobenzene	<1	1	ug/l	8260	10/16/2003	BAS
Surrogates			RANGE	8260	10/16/2003	BAS

R.I. Analytical Laboratories, Inc.**CERTIFICATE OF ANALYSIS**

Ciba Specialty Chemicals Corp.

Date Received: 10/03/2003

Work Order #: 0310-14312

Approved by:

R.I. Analytical

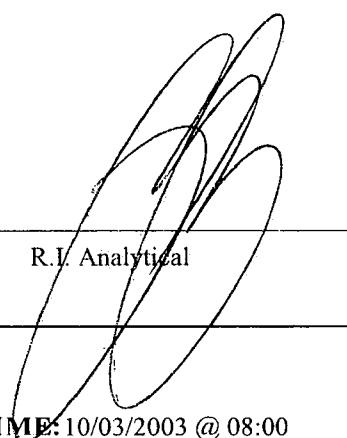
Sample #: 015

SAMPLE TRIP BLANK
SAMPLE TYPE: GRAB**SAMPLE DATE/TIME:** 10/02/2003 @ 08:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Dibromofluoromethane	104	86-118%	8260		10/16/2003	BAS
4-Bromofluorobenzene	92	86-115%	8260		10/16/2003	BAS
Toluene-D8	100	88-110%	8260		10/16/2003	BAS

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS



Approved by: _____
R.I. Analytical

Ciba Specialty Chemicals Corp.

Date Received: 10/03/2003

Work Order #: 0310-14312

Sample #: 016

SAMPLE TRIP BLANK**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 10/03/2003 @ 08:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Volatile Organic Compounds						
chloromethane	<10	10	ug/l	8260	10/16/2003	BAS
Bromomethane	<10	10	ug/l	8260	10/16/2003	BAS
vinyl chloride	<1	1	ug/l	8260	10/16/2003	BAS
dichlorodifluoromethane	<10	10	ug/l	8260	10/16/2003	BAS
chloroethane	<10	10	ug/l	8260	10/16/2003	BAS
methylene chloride	<5	5	ug/l	8260	10/16/2003	BAS
trichlorofluoromethane	<1	1	ug/l	8260	10/16/2003	BAS
1,1-dichloroethylene	<1	1	ug/l	8260	10/16/2003	BAS
1,1-dichloroethane	<1	1	ug/l	8260	10/16/2003	BAS
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	10/16/2003	BAS
chloroform	<1	1	ug/l	8260	10/16/2003	BAS
1,2-dichloroethane	<1	1	ug/l	8260	10/16/2003	BAS
1,1,1-Trichloroethane	<1	1	ug/l	8260	10/16/2003	BAS
carbon tetrachloride	<1	1	ug/l	8260	10/16/2003	BAS
Bromodichloromethane	<1	1	ug/l	8260	10/16/2003	BAS
1,2-dichloropropane	<1	1	ug/l	8260	10/16/2003	BAS
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	10/16/2003	BAS
Trichloroethylene	<1	1	ug/l	8260	10/16/2003	BAS
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	10/16/2003	BAS
1,1,2-Trichloroethane	<1	1	ug/l	8260	10/16/2003	BAS
Dibromochloromethane	<1	1	ug/l	8260	10/16/2003	BAS
Bromoform	<1	1	ug/l	8260	10/16/2003	BAS
Tetrachloroethylene	<1	1	ug/l	8260	10/16/2003	BAS
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	10/16/2003	BAS
Chlorobenzene	<1	1	ug/l	8260	10/16/2003	BAS
2-chloroethyl vinyl ether	<2	2	ug/l	8260	10/16/2003	BAS
Benzene	<1	1	ug/l	8260	10/16/2003	BAS
toluene	<1	1	ug/l	8260	10/16/2003	BAS
ethylbenzene	<1	1	ug/l	8260	10/16/2003	BAS
xylenes(Total)	<1	1	ug/l	8260	10/16/2003	BAS
acetone	<10	10	ug/l	8260	10/16/2003	BAS
Carbon disulfide	<5	5	ug/l	8260	10/16/2003	BAS
2-butanone(MEK)	<10	10	ug/l	8260	10/16/2003	BAS
vinyl acetate	<50	50	ug/l	8260	10/16/2003	BAS
4-methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	10/16/2003	BAS
2-hexanone	<50	50	ug/l	8260	10/16/2003	BAS
Styrene	<1	1	ug/l	8260	10/16/2003	BAS
o-chlorotoluene	<1	1	ug/l	8260	10/16/2003	BAS
1,2-Dichlorobenzene	<1	1	ug/l	8260	10/16/2003	BAS
1,3-Dichlorobenzene	<1	1	ug/l	8260	10/16/2003	BAS
1,4-Dichlorobenzene	<1	1	ug/l	8260	10/16/2003	BAS
Surrogates			RANGE	8260	10/16/2003	BAS

R.I. Analytical Laboratories, Inc.**CERTIFICATE OF ANALYSIS**

Ciba Specialty Chemicals Corp.

Date Received: 10/03/2003

Work Order #: 0310-14312

Approved by:

R.I. Analytical

Sample #: 016

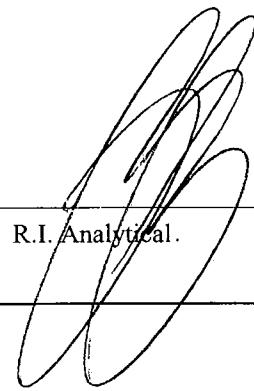
SAMPLE TRIP BLANK**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 10/03/2003 @ 08:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Dibromofluoromethane	105		86-118%	8260	10/16/2003	BAS
4-Bromofluorobenzene	93		86-115%	8260	10/16/2003	BAS
Toluene-D8	100		88-110%	8260	10/16/2003	BAS

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Approved by:


R.I. Analytical.

Ciba Specialty Chemicals Corp.

Date Received: 10/03/2003

Work Order #: 0310-14312

Sample #: 017

SAMPLE EQUIPMENT BLANK
SAMPLE TYPE: GRAB
SAMPLE DATE/TIME: 10/02/2003 @ 11:35

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Volatile Organic Compounds						
chloromethane	<10	10	ug/l	8260	10/16/2003	BAS
Bromomethane	<10	10	ug/l	8260	10/16/2003	BAS
vinyl chloride	<1	1	ug/l	8260	10/16/2003	BAS
dichlorodifluoromethane	<10	10	ug/l	8260	10/16/2003	BAS
chloroethane	<10	10	ug/l	8260	10/16/2003	BAS
methylene chloride	<5	5	ug/l	8260	10/16/2003	BAS
trichlorofluoromethane	<1	1	ug/l	8260	10/16/2003	BAS
1,1-dichloroethylene	<1	1	ug/l	8260	10/16/2003	BAS
1,1-dichloroethane	<1	1	ug/l	8260	10/16/2003	BAS
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	10/16/2003	BAS
chloroform	<1	1	ug/l	8260	10/16/2003	BAS
1,2-dichloroethane	<1	1	ug/l	8260	10/16/2003	BAS
1,1,1-Trichloroethane	<1	1	ug/l	8260	10/16/2003	BAS
carbon tetrachloride	<1	1	ug/l	8260	10/16/2003	BAS
Bromodichloromethane	<1	1	ug/l	8260	10/16/2003	BAS
1,2-dichloropropane	<1	1	ug/l	8260	10/16/2003	BAS
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	10/16/2003	BAS
Trichloroethylene	<1	1	ug/l	8260	10/16/2003	BAS
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	10/16/2003	BAS
1,1,2-Trichloroethane	<1	1	ug/l	8260	10/16/2003	BAS
Dibromochloromethane	<1	1	ug/l	8260	10/16/2003	BAS
Bromoform	<1	1	ug/l	8260	10/16/2003	BAS
Tetrachloroethylene	<1	1	ug/l	8260	10/16/2003	BAS
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	10/16/2003	BAS
Chlorobenzene	<1	1	ug/l	8260	10/16/2003	BAS
2-chloroethyl vinyl ether	<2	2	ug/l	8260	10/16/2003	BAS
Benzene	<1	1	ug/l	8260	10/16/2003	BAS
toluene	<1	1	ug/l	8260	10/16/2003	BAS
ethylbenzene	<1	1	ug/l	8260	10/16/2003	BAS
xylenes(Total)	<1	1	ug/l	8260	10/16/2003	BAS
acetone	<10	10	ug/l	8260	10/16/2003	BAS
Carbon disulfide	<5	5	ug/l	8260	10/16/2003	BAS
2-butanone(MEK)	<10	10	ug/l	8260	10/16/2003	BAS
vinyl acetate	<50	50	ug/l	8260	10/16/2003	BAS
4-methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	10/16/2003	BAS
2-hexanone	<50	50	ug/l	8260	10/16/2003	BAS
Styrene	<1	1	ug/l	8260	10/16/2003	BAS
o-chlorotoluene	<1	1	ug/l	8260	10/16/2003	BAS
1,2-Dichlorobenzene	<1	1	ug/l	8260	10/16/2003	BAS
1,3-Dichlorobenzene	<1	1	ug/l	8260	10/16/2003	BAS
1,4-Dichlorobenzene	<1	1	ug/l	8260	10/16/2003	BAS
Surrogates		RANGE		8260	10/16/2003	BAS

R.I. Analytical Laboratories, Inc.**CERTIFICATE OF ANALYSIS**

Ciba Specialty Chemicals Corp.

Date Received: 10/03/2003

Work Order #: 0310-14312

Approved by: _____

R.I. Analytical

Sample #: 017

SAMPLE EQUIPMENT BLANK**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 10/02/2003 @ 11:35

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Dibromofluoromethane	104		86-118%	8260	10/16/2003	BAS
4-Bromofluorobenzene	92		86-115%	8260	10/16/2003	BAS
Toluene-D8	101		88-110%	8260	10/16/2003	BAS

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 10/03/2003

Work Order #: 0310-14312

Approved by:

R.I. Analytical

Sample #: 018

SAMPLE EQUIPMENT BLANK
SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 10/03/2003 @ 10:35

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Volatile Organic Compounds						
chloromethane	<10	10	ug/l	8260	10/16/2003	BAS
Bromomethane	<10	10	ug/l	8260	10/16/2003	BAS
vinyl chloride	<1	1	ug/l	8260	10/16/2003	BAS
dichlorodifluoromethane	<10	10	ug/l	8260	10/16/2003	BAS
chloroethane	<10	10	ug/l	8260	10/16/2003	BAS
methylene chloride	<5	5	ug/l	8260	10/16/2003	BAS
trichlorofluoromethane	<1	1	ug/l	8260	10/16/2003	BAS
1,1-dichloroethylene	<1	1	ug/l	8260	10/16/2003	BAS
1,1-dichloroethane	<1	1	ug/l	8260	10/16/2003	BAS
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	10/16/2003	BAS
chloroform	<1	1	ug/l	8260	10/16/2003	BAS
1,2-dichloroethane	<1	1	ug/l	8260	10/16/2003	BAS
1,1,1-Trichloroethane	<1	1	ug/l	8260	10/16/2003	BAS
carbon tetrachloride	<1	1	ug/l	8260	10/16/2003	BAS
Bromodichloromethane	<1	1	ug/l	8260	10/16/2003	BAS
1,2-dichloropropane	<1	1	ug/l	8260	10/16/2003	BAS
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	10/16/2003	BAS
Trichloroethylene	<1	1	ug/l	8260	10/16/2003	BAS
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	10/16/2003	BAS
1,1,2-Trichloroethane	<1	1	ug/l	8260	10/16/2003	BAS
Dibromochloromethane	<1	1	ug/l	8260	10/16/2003	BAS
Bromoform	<1	1	ug/l	8260	10/16/2003	BAS
Tetrachloroethylene	<1	1	ug/l	8260	10/16/2003	BAS
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	10/16/2003	BAS
Chlorobenzene	<1	1	ug/l	8260	10/16/2003	BAS
2-chloroethyl vinyl ether	<2	2	ug/l	8260	10/16/2003	BAS
Benzene	<1	1	ug/l	8260	10/16/2003	BAS
toluene	<1	1	ug/l	8260	10/16/2003	BAS
ethylbenzene	<1	1	ug/l	8260	10/16/2003	BAS
xylenes(Total)	<1	1	ug/l	8260	10/16/2003	BAS
acetone	<10	10	ug/l	8260	10/16/2003	BAS
Carbon disulfide	<5	5	ug/l	8260	10/16/2003	BAS
2-butanone(MEK)	<10	10	ug/l	8260	10/16/2003	BAS
vinyl acetate	<50	50	ug/l	8260	10/16/2003	BAS
4-methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	10/16/2003	BAS
2-hexanone	<50	50	ug/l	8260	10/16/2003	BAS
Styrene	<1	1	ug/l	8260	10/16/2003	BAS
o-chlorotoluene	<1	1	ug/l	8260	10/16/2003	BAS
1,2-Dichlorobenzene	<1	1	ug/l	8260	10/16/2003	BAS
1,3-Dichlorobenzene	<1	1	ug/l	8260	10/16/2003	BAS
1,4-Dichlorobenzene	<1	1	ug/l	8260	10/16/2003	BAS
Surrogates		RANGE		8260	10/16/2003	BAS

R.I. Analytical Laboratories, Inc.**CERTIFICATE OF ANALYSIS**

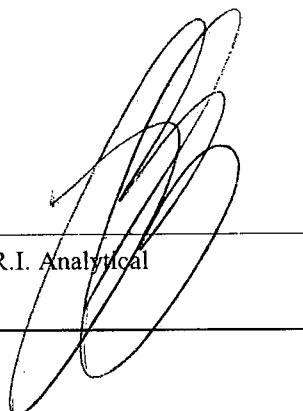
Ciba Specialty Chemicals Corp.

Date Received: 10/03/2003

Work Order #: 0310-14312

Approved by: _____

R.I. Analytical



Sample #: 018

SAMPLE EQUIPMENT BLANK
SAMPLE TYPE: GRAB**SAMPLE DATE/TIME:** 10/03/2003 @ 10:35

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Dibromofluoromethane	104		86-118%	8260	10/16/2003	BAS
4-Bromofluorobenzene	93		86-115%	8260	10/16/2003	BAS
Toluene-D8	99		88-110%	8260	10/16/2003	BAS

VOLATILE ORGANICS METHOD BLANK DATA SHEET

Lab Name: RI ANALYTICALClient: CIBA SPECIALTY CHEMICALS CORP.Date: 10/10/03 @ 18:15W.O. # 0310-14312

CONCENTRATION UNITS:
COMPOUND ug/l

Dichlorodifluoromethane	<10
Chloromethane	<10
Vinyl Chloride	<1
Bromomethane	<10
Chloroethane	<10
Trichlorofluoromethane	<1
1,1-Dichloroethene	<1
Methylene Chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
Chloroform	<1
1,1,1-Trichloroethane	<1
Carbon Tetrachloride	<1
Benzene	<1
1,2-Dichloroethane	<1
Trichloroethylene	<1
1,2-Dichloropropane	<1
Bromodichloromethane	<1
Toluene	<1
1,1,2-Trichloroethane	<1
Tetrachloroethylene	<1
Dibromochloromethane	<1
Chlorobenzene	<1
Ethylbenzene	<1
Xylenes (total)	<1
Bromoform	<1

VOLATILE ORGANICS METHOD BLANK DATA SHEET

Lab Name: RI ANALYTICAL

Client: CIBA SPECIALTY CHEMICALS CORP.

Date: 10/10/03 @ 18:15

W.O.#: 0310-14312

COMPOUND

CONCENTRATION UNITS:
ug/l

1,1,2,2-Tetrachloroethane	<1
o-Chlorotoluene	<1
1,3-Dichlorobenzene	<1
1,4-Dichlorobenzene	<1
1,2-Dichlorobenzene	<1
Carbon disulfide	<5
Acetone	<10
2-chloroethyl vinyl ether	<2
2-Butanone (MEK)	<10
4-Methyl-2-pentanone (MIBK)	<50
2-Hexanone	<50
Stryene	<1
cis-1,3-Dichloropropene	<1
trans-1,3-Dichloropropene	<1
Vinyl Acetate	<50
Dibromofluoromethane	104
1,2-Dichloroethane-d4	98
Toluene-d8	99
4-Bromofluorobenzene	93

VOLATILE ORGANICS DUPLICATE DATA SHEET

Lab Name: RI ANALYTICAL

Client: CIBA SPECIALTY CHEMICALS CORP.

Duplicate Sample # 0310-14312-008

W.O. # 0310-14312

COMPOUND	SAMPLE RESULT	DUPLICATE SAMPLE RESULT	REPORTED MEAN	REPORTED VALUE	RPD
	ug/L	ug/L	ug/L	ug/L	
Dichlorodifluoromethane	<10	<10	<10	<10	0
Chloromethane	<10	<10	<10	<10	0
Vinyl Chloride	<1	<1	<1	<1	0
Bromomethane	<10	<10	<10	<10	0
Chloroethane	<10	<10	<10	<10	0
Trichlorofluoromethane	<1	<1	<1	<1	0
1,1-Dichloroethene	<1	<1	<1	<1	0
Methylene Chloride	<5	<5	<5	<5	0
trans-1,2-Dichloroethene	<1	<1	<1	<1	0
1,1-Dichloroethane	<1	<1	<1	<1	0
Chloroform	<1	<1	<1	<1	0
1,1,1-Trichloroethane	<1	<1	<1	<1	0
Carbon Tetrachloride	<1	<1	<1	<1	0
Benzene	<1	<1	<1	<1	0
1,2-Dichloroethane	<1	<1	<1	<1	0
Trichloroethylene	<1	<1	<1	<1	0
1,2-Dichloropropane	<1	<1	<1	<1	0
Bromodichloromethane	<1	<1	<1	<1	0
Toluene	<1	<1	<1	<1	0
1,1,2-Trichloroethane	<1	<1	<1	<1	0
Tetrachloroethylene	<1	<1	<1	<1	0
Dibromochloromethane	<1	<1	<1	<1	0
Chlorobenzene	11.6	10.8	11.2	11	7
Ethylbenzene	<1	<1	<1	<1	0
Xylenes (total)	4.3	4.5	4.4	4	4
Bromoform	<1	<1	<1	<1	0

VOLATILE ORGANICS DUPLICATE DATA SHEET

Lab Name: RI ANALYTICALClient: CIBA SPECIALTY CHEMICALS CORP.Duplicate Sample # 0310-14312-008W.O. # 0310-14312

COMPOUND	SAMPLE RESULT	DUPLICATE SAMPLE RESULT	MEAN	REPORTED VALUE	RPD
	ug/L	ug/L	ug/L	ug/L	
1,1,2,2-Tetrachloroethane	<1	<1	<1	<1	0
o-Chlorotoluene	71.5	73.5	72.5	72	3
1,3-Dichlorobenzene	<1	<1	<1	<1	0
1,4-Dichlorobenzene	<1	<1	<1	<1	0
1,2-Dichlorobenzene	5.6	5.5	5.6	6	2
Carbon disulfide	<5	<5	<5	<5	0
Acetone	<10	<10	<10	<10	0
2-chloroethyl vinyl ether	<2	<2	<2	<2	0
2-Butanone (MEK)	<10	<10	<10	<10	0
4-Methyl-2-pentanone (MIBK)	<50	<50	<50	<50	0
2-Hexanone	<50	<50	<50	<50	0
Stryene	<1	<1	<1	<1	0
cis-1,3-Dichloropropene	<1	<1	<1	<1	0
trans-1,3-Dichloropropene	<1	<1	<1	<1	0
Vinyl Acetate	<50	<50	<50	<50	0
Dibromofluoromethane	105	105			
1,2-Dichloroethane-d4	100	102			
Toluene-d8	99	100			
4-Bromofluorobenzene	96	95			

VOLATILE ORGANICS LCS DATA SHEET

Lab Name: RI ANALYTICAL

Client: CIBA SPECIALTY CHEMICALS CORP.

Date: 10/11/03 @ 3:38

W.O. # 0310-14312

COMPOUND	SPIKE ADDED ug/L	AMOUNT DETECTED ug/L	% RECOVERY
Dichlorodifluoromethane	50	34	68
Chloromethane	50	42	84
Vinyl Chloride	50	42	84
Bromomethane	50	52	104
Chloroethane	50	43	86
Trichlorofluoromethane	50	49	98
1,1-Dichloroethene	50	48	96
Methylene Chloride	50	46	92
trans-1,2-Dichloroethene	50	48	96
1,1-Dichloroethane	50	48	96
Chloroform	50	50	100
1,1,1-Trichloroethane	50	50	100
Carbon Tetrachloride	50	49	98
Benzene	50	48	96
1,2-Dichloroethane	50	49	98
Trichloroethylene	50	50	100
1,2-Dichloropropane	50	50	100
Bromodichloromethane	50	49	98
Toluene	50	50	100
1,1,2-Trichloroethane	50	50	100
Tetrachloroethylene	50	50	100
Dibromochloromethane	50	50	100
Chlorobenzene	50	51	102
Ethylbenzene	50	50	100
Xylenes (total)	150	153	102
Bromoform	50	52	104

VOLATILE ORGANICS LCS DATA SHEET

Lab Name: RI ANALYTICAL

Client: CIBA SPECIALTY CHEMICALS CORP.

Date: 10/11/03 @ 3:38

W.O. # 0310-14312

COMPOUND	SPIKE ADDED ug/L	AMOUNT DETECTED ug/L	% RECOVERY
1,1,2,2-Tetrachloroethane	50	48	96
o-Chlorotoluene	50	50	100
1,3-Dichlorobenzene	50	50	100
1,4-Dichlorobenzene	50	51	102
1,2-Dichlorobenzene	50	52	104
Carbon disulfide	50	44	88
Acetone	50	47	94
2-chloroethyl vinyl ether	50	36	72
2-Butanone (MEK)	50	44	88
4-Methyl-2-pentanone (MIBK)	50	42	84
2-Hexanone	50	42	84
Stryene	50	50	100
cis-1,3-Dichloropropene	50	47	94
Benzene	50	48	96
Vinyl Acetate	50	42	84
Dibromofluoromethane			103
1,2-Dichloroethane-d4			90
Toluene-d8			99
4-Bromofluorobenzene			96

VOLATILE ORGANICS MATRIX SPIKE/MATRIX SPIKE DUPLICATE DATA SHEET

Lab Name: RI ANALYTICALClient: CIBA SPECIALTY CHEMICALS CORP.Matrix Spike Sample # 0310-14312-008W.O. # 0310-14312

COMPOUND	SAMPLE CONC. ug/L	SPIKE CONC. ug/L	MS CONC. ug/L	MS % REC.	MSD CONC. ug/L	MSD % REC.	RPD
Dichlorodifluoromethane	<10	50	33	66	34	68	3
Chloromethane	<10	50	42	84	42	84	0
Vinyl Chloride	<1	50	43	86	43	86	0
Bromomethane	<10	50	46	92	51	102	10
Chloroethane	<10	50	46	92	46	92	0
Trichlorofluoromethane	<1	50	49	98	50	100	2
1,1-Dichloroethene	<1	50	47	94	48	96	2
Methylene Chloride	<5	50	47	94	47	94	0
trans-1,2-Dichloroethene	<1	50	48	96	48	96	0
1,1-Dichloroethane	<1	50	50	100	50	100	0
Chloroform	<1	50	51	102	50	100	2
1,1,1-Trichloroethane	<1	50	50	100	49	98	2
Carbon Tetrachloride	<1	50	49	98	49	98	0
Benzene	<1	50	50	100	50	100	0
1,2-Dichloroethane	<1	50	49	98	49	98	0
Trichloroethylene	<1	50	50	100	50	100	0
1,2-Dichloropropane	<1	50	49	98	50	100	2
Bromodichloromethane	<1	50	50	100	50	100	0
Toluene	<1	50	50	100	49	98	2
1,1,2-Trichloroethane	<1	50	51	102	50	100	2
Tetrachloroethylene	<1	50	49	98	48	96	2
Dibromochloromethane	<1	50	50	100	51	102	2
Chlorobenzene	11	50	61	100	61	100	0
Ethylbenzene	<1	50	50	100	51	102	2
Xylenes (total)	4	150	157	102	156	101	1
Bromoform	<1	50	52	104	52	104	0

VOLATILE ORGANICS MATRIX SPIKE/MATRIX SPIKE DUPLICATE DATA SHEET

Lab Name: RI ANALYTICALClient: CIBA SPECIALTY CHEMICALS CORP.Matrix Spike Sample # 0304-04231-013W.O. # 0310-14312

COMPOUND	SAMPLE CONC. ug/L	SPIKE CONC. ug/L	MS CONC. ug/L	MS % REC.	MSD CONC. ug/L	MSD % REC.	RPD
1,1,2,2-Tetrachloroethane	<1	50	51	102	50	100	2
o-Chlorotoluene	72	50	114	84	132	120	35
1,3-Dichlorobenzene	<1	50	50	100	49	98	2
1,4-Dichlorobenzene	<1	50	50	100	50	100	0
1,2-Dichlorobenzene	6	50	55	98	58	104	6
Carbon disulfide	<5	50	44	88	43	86	2
Acetone	<10	50	46	92	49	98	6
2-chloroethyl vinyl ether	<2	ND	ND	ND	ND	ND	----
2-Butanone (MEK)	<10	50	45	90	48	96	6
4-Methyl-2-pentanone (MIBK)	<50	50	41	82	43	86	5
2-Hexanone	<50	50	42	84	44	88	5
Stryene	<1	50	49	98	48	96	2
cis-1,3-Dichloropropene	<1	50	47	94	48	96	2
trans-1,3-Dichloropropene	<1	50	47	94	48	96	2
Vinyl Acetate	<50	50	43	86	42	84	2
Dibromofluoromethane				102		104	
1,2-Dichloroethane-d4				100		97	
Toluene-d8				100		101	
4-Bromofluorobenzene				97		97	

VOLATILE ORGANICS METHOD BLANK DATA SHEET

Lab Name: RI ANALYTICAL

Client: CIBA SPECIALTY CHEMICALS CORP.

Date: 10/16/03 @ 9:59

W.O. # 0310-14312

CONCENTRATION UNITS:
COMPOUND ug/l

Dichlorodifluoromethane	<10
Chloromethane	<10
Vinyl Chloride	<1
Bromomethane	<10
Chloroethane	<10
Trichlorofluoromethane	<1
1,1-Dichloroethene	<1
Methylene Chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
Chloroform	<1
1,1,1-Trichloroethane	<1
Carbon Tetrachloride	<1
Benzene	<1
1,2-Dichloroethane	<1
Trichloroethylene	<1
1,2-Dichloropropane	<1
Bromodichloromethane	<1
Toluene	<1
1,1,2-Trichloroethane	<1
Tetrachloroethylene	<1
Dibromochloromethane	<1
Chlorobenzene	<1
Ethylbenzene	<1
Xylenes (total)	<1
Bromoform	<1

VOLATILE ORGANICS METHOD BLANK DATA SHEET

Lab Name: RI ANALYTICAL

Client: CIBA SPECIALTY CHEMICALS CORP.

Date: 10/16/03 @ 9:59

W.O.#: 0310-14312

COMPOUND

CONCENTRATION UNITS:

ug/l

1,1,2,2-Tetrachloroethane	<1
o-Chlorotoluene	<1
1,3-Dichlorobenzene	<1
1,4-Dichlorobenzene	<1
1,2-Dichlorobenzene	<1
Carbon disulfide	<5
Acetone	<10
2-chloroethyl vinyl ether	<2
2-Butanone (MEK)	<10
4-Methyl-2-pentanone (MIBK)	<50
2-Hexanone	<50
Stryene	<1
cis-1,3-Dichloropropene	<1
trans-1,3-Dichloropropene	<1
Vinyl Acetate	<50
Dibromofluoromethane	105
1,2-Dichloroethane-d4	101
Toluene-d8	100
4-Bromofluorobenzene	92

VOLATILE ORGANICS DUPLICATE DATA SHEET

Lab Name: RI ANALYTICAL

Client: CIBA SPECIALTY CHEMICALS CORP.

Duplicate Sample # 0310-14312-014

W.O. # 0310-14312

COMPOUND	SAMPLE	DUPLICATE	REPORTED	MEAN ug/L	VALUE ug/L	RPD
	RESULT ug/L	RESULT ug/L	ug/L			
Dichlorodifluoromethane	<10	<10	<10	<10	<10	0
Chloromethane	<10	<10	<10	<10	<10	0
Vinyl Chloride	1	1	1	1	1	0
Bromomethane	<10	<10	<10	<10	<10	0
Chloroethane	<10	<10	<10	<10	<10	0
Trichlorofluoromethane	<1	<1	<1	<1	<1	0
1,1-Dichloroethene	<1	<1	<1	<1	<1	0
Methylene Chloride	<5	<5	<5	<5	<5	0
trans-1,2-Dichloroethene	<1	<1	<1	<1	<1	0
1,1-Dichloroethane	<1	<1	<1	<1	<1	0
Chloroform	<1	<1	<1	<1	<1	0
1,1,1-Trichloroethane	<1	<1	<1	<1	<1	0
Carbon Tetrachloride	<1	<1	<1	<1	<1	0
Benzene	<1	<1	<1	<1	<1	0
1,2-Dichloroethane	<1	<1	<1	<1	<1	0
Trichloroethylene	2	2	2	2	2	0
1,2-Dichloropropane	<1	<1	<1	<1	<1	0
Bromodichloromethane	<1	<1	<1	<1	<1	0
Toluene	40	36	38	38	38	10
1,1,2-Trichloroethane	<1	<1	<1	<1	<1	0
Tetrachloroethylene	5	4	4.5	4	22	
Dibromochloromethane	<1	<1	<1	<1	<1	0
Chlorobenzene	12	8.6	10.3	10	33	
Ethylbenzene	19	17	18	18	11	
Xylenes (total)	77	68	72.5	72	12	
Bromoform	<1	<1	<1	<1	<1	0

VOLATILE ORGANICS DUPLICATE DATA SHEET

Lab Name: RI ANALYTICALClient: CIBA SPECIALTY CHEMICALS CORP.Duplicate Sample # 0310-14312-014W.O. # 0310-14312

COMPOUND	SAMPLE RESULT ug/L	DUPLICATE SAMPLE RESULT ug/L	REPORTED		RPD
			MEAN ug/L	VALUE ug/L	
1,1,2,2-Tetrachloroethane	<1	<1	<1	<1	0
o-Chlorotoluene	3233	3291	3262	3300	2
1,3-Dichlorobenzene	<1	<1	<1	<1	0
1,4-Dichlorobenzene	<1	<1	<1	<1	0
1,2-Dichlorobenzene	6.6	5.8	6.2	6	13
Carbon disulfide	<5	<5	<5	<5	0
Acetone	<10	<10	<10	<10	0
2-chloroethyl vinyl ether	<2	<2	<2	<2	0
2-Butanone (MEK)	<10	<10	<10	<10	0
4-Methyl-2-pentanone (MIBK)	<50	<50	<50	<50	0
2-Hexanone	<50	<50	<50	<50	0
Stryene	<1	<1	<1	<1	0
cis-1,3-Dichloropropene	<1	<1	<1	<1	0
trans-1,3-Dichloropropene	<1	<1	<1	<1	0
Vinyl Acetate	<50	<50	<50	<50	0
Dibromofluoromethane	104	102			
1,2-Dichloroethane-d4	99	101			
Toluene-d8	100	101			
4-Bromofluorobenzene	96	96			

VOLATILE ORGANICS LCS DATA SHEET

Lab Name: RI ANALYTICAL

Client: CIBA SPECIALTY CHEMICALS CORP.

Date: 10/16/03 @ 13:55

W.O. # 0310-14312

COMPOUND	SPIKE ADDED ug/L	AMOUNT DETECTED ug/L	% RECOVERY
Dichlorodifluoromethane	10	7.1	71
Chloromethane	10	7.6	76
Vinyl Chloride	10	8.2	82
Bromomethane	10	8.0	80
Chloroethane	10	8.2	82
Trichlorofluoromethane	10	8.6	86
1,1-Dichloroethene	10	8.2	82
Methylene Chloride	10	10.5	105
trans-1,2-Dichloroethene	10	9.5	95
1,1-Dichloroethane	10	9.8	98
Chloroform	10	10.2	102
1,1,1-Trichloroethane	10	9.6	96
Carbon Tetrachloride	10	9.2	92
Benzene	10	10.0	100
1,2-Dichloroethane	10	9.6	96
Trichloroethylene	10	9.7	97
1,2-Dichloropropane	10	9.9	99
Bromodichloromethane	10	9.5	95
Toluene	10	10.1	101
1,1,2-Trichloroethane	10	9.8	98
Tetrachloroethylene	10	9.4	94
Dibromochloromethane	10	9.2	92
Chlorobenzene	10	9.9	99
Ethylbenzene	10	10.1	101
Xylenes (total)	20	29.2	146
Bromoform	10	8.6	86

VOLATILE ORGANICS LCS DATA SHEET

Lab Name: RI ANALYTICALClient: CIBA SPECIALTY CHEMICALS CORP.Date: 10/16/03 @ 13:55W.O. # 0310-14312

COMPOUND	SPIKE ADDED ug/L	AMOUNT DETECTED ug/L	% RECOVERY
1,1,2,2-Tetrachloroethane	10	9.5	95
o-Chlorotoluene	10	9.7	97
1,3-Dichlorobenzene	10	9.3	93
1,4-Dichlorobenzene	10	9.4	94
1,2-Dichlorobenzene	10	9.5	95
Carbon disulfide	10	13.3	133
Acetone	10	12.7	127
2-chloroethyl vinyl ether	10	9.4	94
2-Butanone (MEK)	10	7.1	71
4-Methyl-2-pentanone (MIBK)	10	6.9	69
2-Hexanone	10	8.0	80
Stryene	10	9.4	94
cis-1,3-Dichloropropene	10	9.6	96
trans-1,3-Dichloropropene	10	9.1	91
Vinyl Acetate	10	7.4	74
Dibromofluoromethane			102
1,2-Dichloroethane-d4			102
Toluene-d8			101
4-Bromofluorobenzene			99

VOLATILE ORGANICS MATRIX SPIKE/MATRIX SPIKE DUPLICATE DATA SHEET

Lab Name: RI ANALYTICAL

Client: CIBA SPECIALTY CHEMICALS CORP.

Matrix Spike Sample # 0310-14312-014

W.O. # 0310-14312

COMPOUND	SAMPLE CONC. ug/L	SPIKE CONC. ug/L	MS CONC. ug/L	MS % REC.	MSD CONC. ug/L	MSD % REC.	RPD
Dichlorodifluoromethane	<500	2500	1150	46	1050	42	9
Chloromethane	<500	2500	1850	74	1800	72	3
Vinyl Chloride	<50	2500	1800	72	1750	70	3
Bromomethane	<500	2500	2350	94	2350	94	0
Chloroethane	<500	2500	1950	78	2000	80	3
Trichlorofluoromethane	<50	2500	2250	90	2200	88	2
1,1-Dichloroethene	<50	2500	2250	90	2200	88	2
Methylene Chloride	<250	2500	2200	88	2100	84	5
trans-1,2-Dichloroethene	<50	2500	2250	90	2200	88	2
1,1-Dichloroethane	<50	2500	2300	92	2300	92	0
Chloroform	<50	2500	2400	96	2400	96	0
1,1,1-Trichloroethane	<50	2500	2400	96	2400	96	0
Carbon Tetrachloride	<50	2500	2350	94	2350	94	0
Benzene	<50	2500	2350	94	2400	96	2
1,2-Dichloroethane	<50	2500	2300	92	2250	90	2
Trichloroethylene	<50	2500	2400	96	2400	96	0
1,2-Dichloropropane	<50	2500	2350	94	2300	92	2
Bromodichloromethane	<50	2500	2350	94	2350	94	0
Toluene	<50	2500	2500	100	2450	98	2
1,1,2-Trichloroethane	<50	2500	2350	94	2300	92	2
Tetrachloroethylene	<50	2500	2500	100	2500	100	0
Dibromochloromethane	<50	2500	2450	98	2400	96	2
Chlorobenzene	<50	2500	2450	98	2450	98	0
Ethylbenzene	<50	2500	2400	96	2400	96	0
Xylenes (total)	<50	7500	7350	98	7400	99	1
Bromoform	<50	2500	2350	94	2350	94	0

VOLATILE ORGANICS MATRIX SPIKE/MATRIX SPIKE DUPLICATE DATA SHEET

Lab Name: RI ANALYTICAL

Client: CIBA SPECIALTY CHEMICALS CORP.

Matrix Spike Sample # 0310-14312-014

W.O. # 0310-14312

COMPOUND	SAMPLE CONC. ug/L	SPIKE CONC. ug/L	MS CONC. ug/L	MS % REC.	MSD CONC. ug/L	MSD % REC.	RPD
1,1,2,2-Tetrachloroethane	<50	2500	2150	86	2100	84	2
o-Chlorotoluene	3300	2500	6400	124	6700	136	9
1,3-Dichlorobenzene	<50	2500	2500	100	2500	100	0
1,4-Dichlorobenzene	<50	2500	2550	102	2550	102	0
1,2-Dichlorobenzene	<50	2500	2550	102	2500	100	2
Carbon disulfide	<250	2500	2000	80	1950	78	3
Acetone	<500	2500	1800	72	1750	70	3
2-chloroethyl vinyl ether	<100	2500	1300	52	1300	52	0
2-Butanone (MEK)	<500	2500	1850	74	1800	72	3
4-Methyl-2-pentanone (MIBK)	<2500	2500	1800	72	1750	70	3
2-Hexanone	<2500	2500	1650	66	1650	66	0
Stryene	<50	2500	2400	96	2350	94	2
cis-1,3-Dichloropropene	<50	2500	2300	92	2300	92	0
trans-1,3-Dichloropropene	<50	2500	2300	92	2300	92	0
Vinyl Acetate	<2500	2500	1900	76	1850	74	3
Dibromofluoromethane				104		104	
1,2-Dichloroethane-d4				97		97	
Toluene-d8				103		102	
4-Bromofluorobenzene				94		94	

R.I. Analytical Laboratories, Inc.

41 Illinois Avenue
Warwick, RI 02888
Phone: (800) 937-2580
Fax: (401) 738-1970

950 Boylston Street, Unit 102
Newton Highlands, MA 02461
Phone: (888) 228-3334
Fax: (617) 965-5624

CHAIN OF CUSTODY RECORD

Page 1 of 2

Container Type Codes:
P = Plastic V = Vial
G = Glass St = Sterile
AG = Amber Glass
O = Other (describe)

Preservative Codes:
NP = Non preserved S = Sulfuric
I = Cooled 4°C H = HCl
N = Nitric SH = NaOH
M = Methanol SB = NaHSO₄

Matrix Codes:
GW = Groundwater S = Soil
WW = Wastewater SL = Sludge
DW = Potable Water A = Air
O = Other (describe) B = Bulk/Solid

Date Collected	Time Collected	Sample ID	G = Grab C = Comp.	Containers # + Code	Preservative Code	Matrix Code	Analyses Requested
10/2/03	—	SW- 130	-	-	-	-	No sample well obstructed
10/2/03	1025	SW- 110	G	3 V	H	GW	8260 including O-Chlorotoluene, field data *
10/2/03	1045	P-37S	G	3 V	H	GW	8260 including O-Chlorotoluene, field data *
10/2/03	1120	P-38S	G	3 V	H	GW	8260 including O-Chlorotoluene, field data *
10/2/03	1140	PW-110 pump house	G	3 V	H	GW	8260 including O-Chlorotoluene, field data *
10/2/03	1200	P-36S	G	3 V	H	GW	8260 including O-Chlorotoluene, field data *
10/2/03	1240	MW-1S	G	3 V	H	GW	8260 including O-Chlorotoluene, field data *
10/2/03	1350	MW-12S	G	3 V	H	GW	8260 including O-Chlorotoluene, field data *
10/2/03	1435	MW-4S	G	6 V**	H	GW	8260 including O-Chlorotoluene, field data *
10/3/03	1050	PW-120 pump house	G	3 V	H	GW	8260 including O-Chlorotoluene, field data *

Client Information**Project Information**

Company Name: Ciba Geigy	Project Name / Location: Ciba Geigy site on Mill Street in Cranston, RI		
Address: Rt 37 West, PO BOX 71	P.O. Number:	Project Number:	
City / State / Zip: Tom River, NJ 08754-0071	Report To:	Phone:	Fax:
Phone: (903) 914-2737	Fax: (903) 914-2909	Sampled by: <i>J. Chraft, R. Brant</i>	
Contact: Mr. Barry Cohen	Reference Proposal:		

Relinquished by:	Date	Time	Received by:	Date	Time
<i>J. Chraft</i>	10.3.03	1500	<i>K. Beidensmith</i>	10/3/03	1500

Turn Around Time:
<input checked="" type="checkbox"/> Normal
<input type="checkbox"/> 5 business days Surcharges may apply
<input type="checkbox"/> Rush (business days)

Project Comments:

*pH, temperature, S.C., DO, measured in field. Field notes and results attached.

**QC to include Matrix Spike, Matrix Spike Duplicate, Duplicate

RIAL USE ONLY:

Pick-Up Only
 RIAL Sampled. Attach field hours
 Shipped on Ice *0310*
RIAL W.O. # *14312*

R.I. Analytical Laboratories, Inc.

41 Illinois Avenue
Warwick, RI 02888
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CHAIN OF CUSTODY RECORD

Page 2 of 2

Container Type Codes:
P = Plastic V = Vial
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AG = Amber Glass
O = Other (describe)

Preservative Codes:
NP = Non preserved S = Sulfuric
I = Cooled 4°C H = HCl
N = Nitric SH = NaOH
M = Methanol SB = NaHSO₄

Matrix Codes:
GW = Groundwater S = Soil
WW = Wastewater Sl = Sludge
DW = Potable Water A = Air
O = Other (describe) B = Bulk/Solid

Date Collected	Time Collected	Sample ID	G = Grab C = Comp.	Containers # + Code	Preservative Code	Matrix Code	Analyses Requested
10/3/03	1055	SW-120	G	3 V	H	WW	8260 including O-Chlorotoluene, field data*
10/3/03	1135	PW-130 pump house	G	3 V	H	WW	8260 including O-Chlorotoluene, field data*
10/3/03	1145	P-35S	G	3 V	H	WW	8260 including O-Chlorotoluene, field data*
10/3/03	1215	MW-2S	G	3 V	H	WW	8260 including O-Chlorotoluene, field data*
10/3/03	1310	MW-21S	G	6 V**	H	WW	8260 including O-Chlorotoluene, field data*
10/2/03	0845	Trip Blank	G	2V	H	DI	8260 including O-Chlorotoluene
10/3/03	0800	Trip Blank	G	2V	H	DI	8260 including O-Chlorotoluene
10/2/03	1135	Equipment Blank	G	2V	H	DI	8260 including O-Chlorotoluene
10/3/03	1035	Equipment Blank	G	2V	H	DI	8260 including O-Chlorotoluene

Client Information**Project Information**

Company Name: Ciba Geigy	Project Name / Location: Ciba Geigy site on Mill Street in Cranston, RI		
Address: Rt 37 West, PO BOX 71	P.O. Number:	Project Number:	
City / State / Zip: Tom River, NJ 08754-0071	Report To:	Phone:	Fax:
Phone: (903) 914-2737	Sampled by: <i>J. Chraot, R. Brant</i>		
Contact: Mr. Barry Cohen	Reference Proposal:		

Relinquished by:	Date	Time	Received by:	Date	Time
<i>J. Chraot</i>	10-3-03	1500	<i>B. Cohen/M. Geig</i>	10/3/03	1500

Turn Around Time:
<input checked="" type="checkbox"/> Normal
<input type="checkbox"/> 5 business days Surcharges may apply
<input type="checkbox"/> Rush (business days)

Project Comments:

* pH, temperature, S.C., D.O., measured in field. Field notes and results attached.

**QC to include:
Matrix Spike, Matrix Spike Duplicate, Duplicate

RIAL USE ONLY:

<input type="checkbox"/> Pick-Up Only
<input checked="" type="checkbox"/> RIAL Sampled. Attach field hours
<input checked="" type="checkbox"/> Shipped on Ice <i>(9310-9312)</i>

CIBA MONITORING WELLS

J. Chraft, R. Brant

October 2, 2003

WELL # SW-130

Inch Well 2"

Depth to Bottom _____

Depth to Water _____

Height of Column _____

Amount of Purge _____

PURGE START / TIME =	# 1	# 2	# 3
PH			
Specific Conductance			
Temperature			
D.O.			
Purge End Time			
Sample Time			

COMMENTS: Well is obstructed and
can no longer be sampled

CIBA MONITORING WELLS

J. Chraft, R. Brant

October 2, 2003
102S

WELL # SW-110

Inch Well 2"

Depth to Bottom 35.0

Depth to Water 10.6

Height of Column 24.4

Amount of Purge 12.2

PURGE START / TIME = 0950	# 1	# 2	# 3
PH	6.6	6.7	6.7
Specific Conductance	380	390	390
Temperature	61°F	62°F	62°F
D.O.	4.4		
Purge End Time	10:10		
Sample Time	10:25		

COMMENTS:

CIBA MONITORING WELLS

J. Chraft, R. Brant

October 2, 2003
1045

WELL # P-37S

Inch Well 2"

Depth to Bottom 17.0

Depth to Water 10.1

Height of Column 6.9

Amount of Purge 4.0

PURGE START / TIME = 1000	# 1	# 2	# 3
PH	7.1	7.1	7.2
Specific Conductance	560	570	590
Temperature	66°F	66°	66°
D.O.	2.1		
Purge End Time	1030		
Sample Time	1045		

COMMENTS:

CIBA MONITORING WELLS

J. Chraft, R. Brant

October 2, 2003
1120

WELL # P-38S

Inch Well 2"

Depth to Bottom 18.3

Depth to Water 8.8

Height of Column 9.5

Amount of Purge 4.8

PURGE START / TIME = <u>1040</u>	# 1	# 2	# 3
PH	<u>6.7</u>	<u>6.7</u>	<u>6.6</u>
Specific Conductance	<u>400</u>	<u>410</u>	<u>390</u>
Temperature	<u>62°F</u>	<u>63°F</u>	<u>63°F</u>
D.O.	<u>4.3</u>		
Purge End Time	<u>1055</u>		
Sample Time	<u>1120</u>		

COMMENTS:

CIBA MONITORING WELLS

J. Chraft, R. Brant

October 2, 2003
1140

WELL # Pump House P-110 **Inch Well** Pumping
well

Depth to Bottom _____

Depth to Water _____

Height of Column _____

Amount of Purge _____

PURGE START / TIME = N/A	# 1	# 2	# 3
PH	6.7	6.6	6.6
Specific Conductance	360	380	370
Temperature	60	62	63
D.O.	0.8		
Purge End Time			
Sample Time	1140		

COMMENTS:

CIBA MONITORING WELLS

J. Chraft, R. Brant

October 2, 2003
1200

WELL # P-36S

Inch Well 2"

Depth to Bottom 18.2

Depth to Water 10.2

Height of Column 8.0

Amount of Purge 4.0

PURGE START / TIME =	# 1	# 2	# 3
PH	7.1	7.2	7.2
Specific Conductance	790	800	780
Temperature	66 °F	66 °F	66 °F
D.O.	2.4		
Purge End Time	1150		
Sample Time	1200		

COMMENTS:

CIBA MONITORING WELLS

J. Chraft, R. Brant

October 2, 2003
1240

WELL # MW-1S

Inch Well 4"

Depth to Bottom 18.8

Depth to Water 9.7

Height of Column 9.1

Amount of Purge 18.2

PURGE START / TIME =	#1	#2	#3
PH	6.4	6.9	6.7
Specific Conductance	650	680	660
Temperature	63°F	63°F	62°F
D.O.	2.1		
Purge End Time	1230		
Sample Time	1240		

COMMENTS: Black particulate in water

CIBA MONITORING WELLS

J. Chraft, R. Brant

October 2, 2003

BSD

WELL # MW-128

Inch Well 4"

Depth to Bottom 22.8

Depth to Water 12.8

Height of Column 10.0

Amount of Purge 20.0

PURGE START / TIME =	<u>1300</u>	# 1	# 2	# 3
PH		<u>6.6</u>	<u>6.7</u>	<u>6.7</u>
Specific Conductance		<u>350</u>	<u>360</u>	<u>350</u>
Temperature		<u>66</u>	<u>65</u>	<u>64</u>
D.O.		<u>2.0</u>		
Purge End Time	<u>1335</u>			
Sample Time	<u>1350</u>			

COMMENTS:

CIBA MONITORING WELLS

J. Chraft, R. Brant

October 2, 2003
1435

WELL # MW-43

Inch Well 4"

Depth to Bottom 21.5

Depth to Water 12.0

Height of Column 9.5

Amount of Purge 19

PURGE START / TIME =	# 1	# 2	# 3
PH	6.4	6.4	6.4
Specific Conductance	460	480	480
Temperature	65	66	65
D.O.	4.2		
Purge End Time	1425		
Sample Time	1435		

COMMENTS:

CIBA MONITORING WELLS

J. Chraft, R. Brant

October 3, 2003
1050

WELL # P-W 120 (pump house) Inch Well N/A

Depth to Bottom _____

Depth to Water _____

Height of Column _____ N/A

Amount of Purge _____

PURGE START / TIME =	# 1	# 2	# 3	# 4
PH	6.7	6.9	6.8	6.8
Specific Conductance	540	460	460	480
Temperature	60	60	59°	58
D.O.	0.8			
Purge End Time				
Sample Time	1050			

COMMENTS:

CIBA MONITORING WELLS

J. Chraft, R. Brant

October 3, 2003

1055

WELL # SW-120

Inch Well 2"

Depth to Bottom 26.4

Depth to Water 9.7

Height of Column 16.7

Amount of Purge 8.4

PURGE START / TIME = <u>1030</u>	# 1	# 2	# 3
PH	<u>6.9</u>	<u>6.9</u>	<u>6.9</u>
Specific Conductance	<u>430</u>	<u>450</u>	<u>450</u>
Temperature	<u>59°F</u>	<u>60°</u>	<u>60°</u>
D.O.	<u>3.0</u>		
Purge End Time	<u>1050</u>		
Sample Time	<u>1055</u>		

COMMENTS:

CIBA MONITORING WELLS

J. Chraft, R. Brant

October 3, 2003

1135

WELL # PW 130 (Pump House) Inch Well N/A

Depth to Bottom _____

Depth to Water N/A

Height of Column _____

Amount of Purge _____

PURGE START / TIME =	# 1	# 2	# 3
PH	6.9	6.9	6.8
Specific Conductance	410	430	420
Temperature	58° F	59°	59°
D.O.	6.8		
Purge End Time			
Sample Time	1135		

COMMENTS:

CIBA MONITORING WELLS

J. Chraft, R. Brant

October 3, 2003
1145

WELL # P-35S

Inch Well 2"

Depth to Bottom 17.8

Depth to Water 9.8

Height of Column 8.0

Amount of Purge 4.0

PURGE START / TIME = <u>1125</u>	# 1	# 2	# 3
PH	<u>6.9</u>	<u>7.1</u>	<u>7.1</u>
Specific Conductance	<u>720</u>	<u>750</u>	<u>740</u>
Temperature	<u>64</u>	<u>64</u>	<u>64</u>
D.O.	<u>2.5</u>		
Purge End Time	<u>1135</u>		
Sample Time	<u>1145</u>		

COMMENTS:

CIBA MONITORING WELLS

J. Chraft, R. Brant

October 3, 2003
1215

WELL # MW-2S

Inch Well 4"

Depth to Bottom 19.3

Depth to Water 9.9

Height of Column 9.4

Amount of Purge 18.8

PURGE START / TIME = <u>10:20</u>	# 1	# 2	# 3
PH	6.9	6.9	6.9
Specific Conductance	770	720	690
Temperature	62°F	62°F	62°F
D.O.	0.9		
Purge End Time	<u>11:50</u>		
Sample Time	<u>12:15</u>		

COMMENTS:

CIBA MONITORING WELLS

J. Chraft, R. Brant

October 3, 2003

1310

WELL # MW-21S

Inch Well 4"

Depth to Bottom 18.2

Depth to Water 6.4

Height of Column 11.8

Amount of Purge 23.6

PURGE START / TIME = 1215	# 1	# 2	# 3
PH	6.5	6.6	6.6
Specific Conductance	340	340	340
Temperature	65	65	64
D.O.	1.8		
Purge End Time	1300		
Sample Time	1310		

COMMENTS: